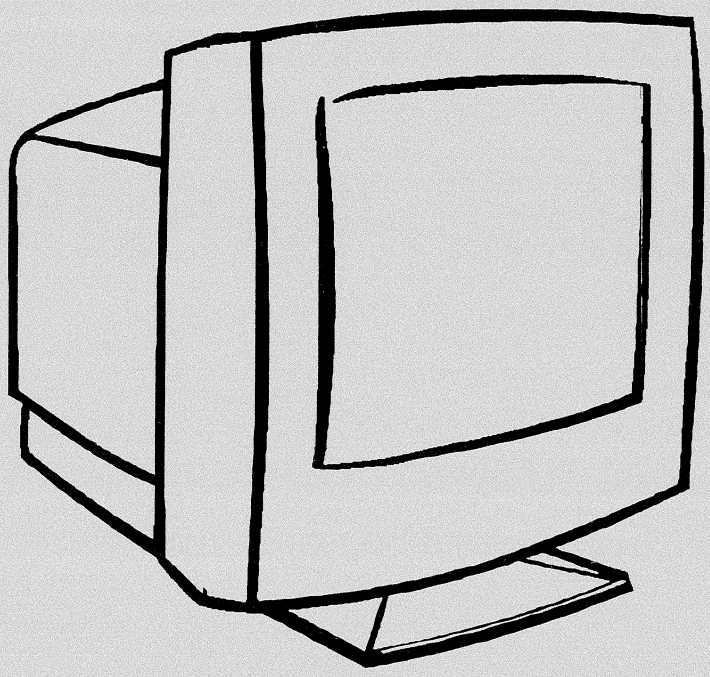
Service Manual



COMPAQ

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MANUFACTURE DATE : July. 2002

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1. SPECIFICATIONS FOR 9GIr SERIES COLOR MONITOR

1. CRT : 48.26cm (19") 90 Deflection, 29mm Neck, flat 0.26mm Dot Pitch, Non-Glare Screen

2. Viewable image Size: 45.72cm (18") diagonal

3. Display Color: Unlimited Colors

4. External Controls:
   Power On/Off, OSD key, Function knob: Contrast, Brightness, H-Size, H-Center, V-Size, V-Center, ZOOM, Pincushion, Trapezoid, Pin-Balance, Parallelogram, Rotation, Moire Reduce, Recall, Degaussing, Color Temperature.

5. Input Video Signal

	Mode 1	Mode 2	Mode 3	Mode 4
	RGB Analog	RGB Analog	RGB Analog	RGB Analog
Horiz. Sync:	TTL Level	TTL Level	TTL Level	TTL Level
	Negative	Negative	Negative	Positive
Vert. Sync:	TTL Level	TTL Level	TTL Level	TTL Level
	Positive	Negative	Negative	Positive
Horizontal:	720 (H)	640 (H)	640 (H)	800 (H)
Vertical :	400 (V)	480 (V)	480(V)	600(V)
Fh (kHz):	31.327	31.469	43.269	53.750
Fv (Hz) :	69.616	59.9	85.008	84.997

	Mode 5	Mode 6	Mode 7	Mode 8
	RGB Analog	RGB Analog	RGB Analog	RGB Analog
Horiz. Sync:	TTL Level	TTL Level	TTL Level	TTL Level
	Positive	Positive	Positive	Positive
Vert. Sync:	TTL Level	TTL Level	TTL Level	TTL Level
	Positive	Positive	Positive	Positive
Horizontal:	1024 (H)	1280 (H)	1280 (H)	1600 (H)
Vertical :	768 (V)	960 (V)	1024 (V)	1200 (V)
Fh (kHz):	68.677	85.935	91.148	93.75
Fv (Hz) :	84.997	85	85	75

6. Display Size
   Horizontal: 346 mm
   Vertical: 260 mm

7. Scanning Frequencies
   Horizontal: 30KHz ~ 98KHz
   Vertical: 50 Hz ~ 160 Hz

8. Factory Preset Timings: 8
   User Timings: 20

9. Mis-convergence
   Center: 0.3 mm Max.
   Corner: 0.4 mm Max.

10. Video Dot Rate: 200 MHz

11. Power Source:
    Switching Mode Power Supply
    AC 100 ~240V, 50/60Hz Universal Type

12. Operating Temperature: 0°C to 40°C Ambient

13. Humidity : 10% to 85% Relative, Non-Condensing

14. Weight: 20.0 Kg (Net), 23.6Kg (Gross) for 9GIr

15 Dimensions Monitor:
   Carton: 575(W) × 526(H) × 655(D) mm
   Monitor: 446(W) × 436(H) ×455 (D) mm for 9GIr

16. External Connection :
    15 Pin D-type Connector AC Power Cord

17. Speaker: (for 9GIrA only)
    Rate power: 1.5W (per channel)
    Impedance: 8Ω

18. Regulations: UL, CSA, FDA, FCC, TÜV/GS, CE, MPR-II
    TCO

2. PRECAUTIONS AND NOTICES

2-1 SAFETY PRECAUTIONS

1. Observe all caution and safety related notes located inside the display cabinet.
2. Operation of the display with the cover removed, may cause a serious shock hazard from the display power supply. Work on the display should not be attempted by anyone who is not thoroughly familiar with precautions necessary when working on high voltage equipment.
3. Do not install, remove or handle the picture tube in any manner unless shatter-proof goggles are worn. People who are not so equipped should be kept away while handling picture tube. Keep picture tube away from the body while handling.
4. The picture tube is constructed to limit X-RAY radiation to 0.5 mR/HR. For continued protection, use the designated replacement tube only, and adjust the voltages so that the designated maximum rating at the anode will not be exceeded.
5. Symbol "△" means safety relative parts. The use of substitute replacement parts which do not have the same characteristics as specified in the parts list may create shock, fire or explode etc.
6. Symbol"⚠" means X-ray relative parts. Before replacing any of these components please read the parts list in this manual carefully to avoid creating higher anode voltage or x-ray. Especially for sealed controls, such as VR902, VR702 and FBT screen VR etc, which were sealed by the manufacturer once their optimum position has been set, please don't dismantle them as your likes, otherwise you will break or damage the component. If you need replace the parts with sealed control, please adjust the relative VR to make sure the B+ voltage under 61.8Vdc at 640*480@60Hz and well seal it with A+B glue or equivalent, which you can not move away with one screw driver.
7. Before returning a serviced display to the customer, a thorough safety test must be performed to verify that the display is safe to operate without danger or shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screw heads.
   Test method for current leakage is described as follow.
   (a) Plug the AC line cord directly into rated AC outlet (do not use a line isolation transformer during this check).
   (b) Use an AC voltmeter having 5000 ohms per volt or with more sensitivity in the following manner: Connect a 1500 ohms 10 Watt resistor, paralleled by a 0.15UF, AC type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the combination of 1500 ohms resistor and 0.15UF capacitor.
   (c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.
   (d) Voltage measured must not exceed 0.5 volts RMS. This corresponds to 0.35 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

2-2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-RAY radiation or other hazards.

2-3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
2. When replacing a high wattage resistor (more than 1/2W of metal oxide film resistor) in circuit board, keep the resistor about 10mm (1/2 in) away from circuit board.
3. Keep wires away from high voltage or high temperature components.
4. Keep wires in their original position so as to reduce interference.

2-4 HIGH VOLTAGE WARNING

Operation of monitor outside of cabinet or with back removed may cause a serious shock hazard. Work on this model should only be performed by those who are thoroughly familiar with precautions necessary when working on high voltage equipment.
Exercise care when servicing this chassis with power applied. Many B plus and high voltage terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis. Maintain interconnecting ground lead connections between chassis and picture tube dag when operating chassis.
Certain HV failures can increase X-ray radiation. Monitor should not be operated with HV levels exceeding the specified rating for the chassis type. The maximum operating HV specified for the chassis used in this monitor is

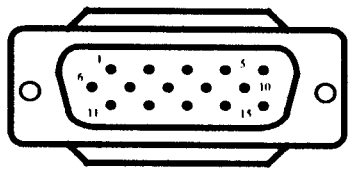
26.5KV ± 1KV

with a line voltage of 120/240 VAC. Higher voltage may also increase possibility of failure in HV supply.
It is important to maintain specified values of all components in the horizontal and high voltage circuits and anywhere else in the monitor that could cause a rise in high voltage or operating supply voltages. No changes should be made to the original design of the monitor. Components shown in the shaded areas on the schematic should be replaced with exact factory replacement parts. The use of unauthorized substitute parts may create a shock, fire or other hazard.
To determine the presence of high voltage, use an accurate, high impedance, HV meter connected between second anode lead and CRT dag grounding device. When servicing the High Voltage System, remove static charge from it by connecting a 20K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead.(AC line cord disconnected from AC power outlet.)
The picture tube used in this monitor employs integral implosion protection. Replace with tube of the same type number for continue safety. Do not lift picture tube by the neck. Handle the picture tube only after discharging the high voltage completely.

3. OPERATING INSTRUCTIONS

This procedure gives you instructions for installing and using the 9G color display.

1. Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduit ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.
2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	RED	9.	NC
2.	GREEN	10.	GND
3.	BLUE	11.	SYNC. GND
4.	GND	12.	SDA
5.	GND	13.	HORIZ. SYNC
6.	GND-R	14.	VERT. SYNC (FVCLK)
7.	GND-G	15.	SCL
8.	GND-B		

3. Apply power to the display by turning the power switch to the "ON" position and allow about thirty seconds for display tube warm-up. The Power-On indicator lights when the display is on.
4. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display.
5. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.
6. If your 9G Series color display requires service, it must be returned with the power cord.

4. ADJUSTMENT

4-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

4-2 MAIN ADJUSTMENTS

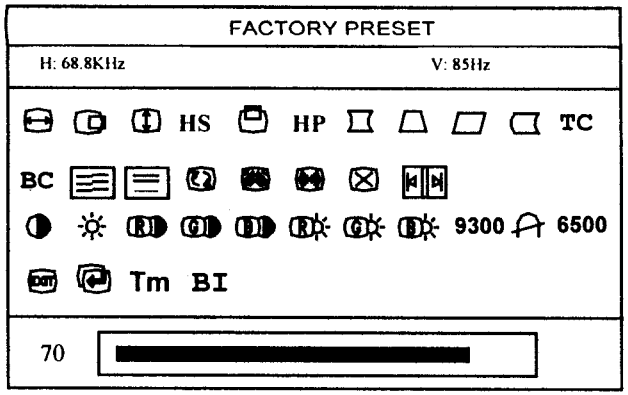
NO.	FUNCTION	LOCATION	DESIGNATION
1.	B + ADJ	PCB - MAIN	VR902
2.	SCREEN ADJ	FLY BACK TRANS	T402
3.	FOCUS ADJ	FLY BACK TRANS	T402
4.	ABL ADJ	PCB - MAIN	VR701
5.	SUB-BRIGHTNESS ADJ	PCB - MAIN	VR702

4-3 ADJUSTMENT METHOD

1. B + & HV voltage adjustment and hold down circuit confirmation:
   A. Chrome-2000 Signal generator or PC equivalent set mode 2, VGA 640X680@60Hz pattern 1 .
   B. Connect a DC Volt meter between TP902 or D925 cathode and ground, then adjust VR902 to be 61.8VDC(B+).
   C. Connect a DC Volt meter between TP701(G1) and ground, Brightness set to max. Then adjust VR702 to be -40 VDC.
   D. Connect a 22kΩ resistor in parallel with R419 to increase the HV, the hold down circuit will operate and the display will disappear. Then disconnect this resistor to bring the unit to normal condition.

2. Factory preset Timings Adjustment:
   A. Press **MENU Key** to show **OSD** window press **Up** or **Down Key** to switch the functional controls.
   B. Press the **Up** Key to select the **"ZOOM"** function, then press the **MENU** Key. While do not release the **MENU** Key until the **OSD** window changed to the Factory preset window.
   C. The Factory preset window contains the following functional controls. Select one of the control by press the **MENU** key. Then press the **Up/Down** Key to adjust it's value for the optimum picture.
   MENU Key to Quit the OSD window. Mean while the new setting data will be saved in the memory.

   E. To switches the input signal to the other Timing Mode. Please follow step C ~ D to get the optimum picture.
   F. Select the " ↵ " RETURN function and press the MENU Key, then the Factor Preset window will be returned to the original OSD window.(user's operating condition)
   G. The setting data of the CONTRAST, BRIGHTNESS, PIN-BALANCE, PARALLELOGRAM, ROTATION, COLOR TEMPERATURE are common mode saved in the memory. Don't needed adjust it individual at every timing Mode and save in the memory.
   H ◀ ▶ Model select: for factory only, service engineer can't changed.



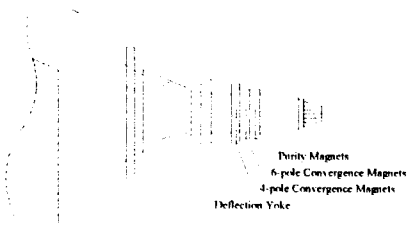
	CONTRAST		H-MOIRE REDUCE
	BRIGHTNESS		V-MOIRE REDUCE
	H-CENTER		R-GAIN
	H-SIZE		G-GAIN
	V-CENTER		B-GAIN
	V-SIZE		R-BIAS
	ZOOM		G-BIAS
TC	TOP COMER		R-BIAS
BC	BOTTOM COMER	9300	COLOR TEMPERATURE
	PINCUSHION	6500	COLOR TEMPERATURE
	TRAPEZOID		DEGAUSS
	PIN-BALANCE		OSD EXIT
	PARALLELOGRAM		RETURN
	ROTATION		Vs LINEAR
HS	SUB-H-SIZE		Vc LINEAR
HP	H-SIZE-PHASE	BI	B/I ON/OFF
		Tm	Used time

3. White Balance, Luminance adjustment:
   A. Bias (Low Luminance) adjustment:
      (a) Set mode 5 1024 x 768 Fh: 68.7KHz full white pattern.
      (b) To make the adjustment condition is under the Factory preset window. Same as step 2-C.
      (c) Warm up more than 30 minutes.
      (d) Brightness set to maximum. Contrast set to max. full white pattern, then adjust FBT screen VR to make Y= 4.0±0.5cd/m^2.
      (e) Adjust G-Bias, B-Bias, R-Bias, to make the setting value is(20), then adjust the R.G.B Bias individual to the color temperature x=265 ± 10, y= 290 ± 10, Y= 4.0±0.5cd/m^2.
   B. Gain (High light) adjustment:
      (a) Set mode 5 1024 x 768 Fh: 68.7KHz full white pattern.
      (b) Brightness set to raster just cut off and set the contrast to max.
      (c) Adjust G-Gain, B-Gain, R-Gain, to make color temperature x=283 ± 10, y=297± 10, Y=130~140 cd/m^2.
   C. Recheck item A&B to make sure both of them in spec. Finally select OSD function to the 9300°K function, then press the MENU Key. To make the setting data saved in the memory.
   D. The adjustment of 6500°K white Balance, May follow step A ~ C , with the x=313 ± 10, y=329 ± 10, Y=130~140 cd/m^2.
   E. Full white luminance:
      (a) Set mode 2 640 x 680 Fh: 68.7KHz full white pattern.
      (b) Image Size : H:346±4mm V:270±4mm.
      (c) Brightness set to raster just cut off and set the contrast to max.
      (d) Adjust VR701 to the luminance at 90~95 cd/m^2.

4. Focus Adjustment:
   A. Set mode 5 1024 x 768 Fh: 68.7KHz with character full page.
   B. Brightness to cut off and contrast to max.
   C. Then adjust focus VR1 to a fine vertical line.
   D. Adjust focus VR2 to a fine horizontal line.
   E. Repeat step C & D..

5. Purity Adjustment
   A. Be sure that the display is not being exposed to any external magnetic fields.
   B. Ensure that the spacing between the Purity, Convergence, Magnet, (PCM), assembly and the CRT stem is 29mm .(See below diagram)
   C. Produce a complete, red pattern on the display. Adjust the purity magnet rings on the PCM assembly to obtain a complete field of the color red. This is done by moving the two tabs in such a manner that they advance in an opposite direction but at the same time to obtain the same angle between the two tabs, which should be approximately 180'.
   D. Check the complete blue and complete green patterns to observe their respective color purity. Make minor adjustments if needed.

RELATIVE PLACEMENT OF TYPICAL COMPONENTS



6. Convergence adjustment

A. Produce a magenta crosshatch on the display.
B. Adjust the focus for the best overall focus on the display.
   Also adjust the brightness to the desired condition.
C. Vertical red and blue lines are converged by varying the angle between the two tabs of the 4 pole magnets on the PCM assembly. (See above diagrams)
D. Horizontal red and blue lines are converged by varying the two tabs together, keeping the angle between them constant.
E. Produce a white crosshatch pattern on the display.
F. Vertical green and magenta lines are converged by varying the angle between the two tabs of the 6-pole magnets.
G. Horizontal green and magenta lines are converged by varying the two tabs together, keeping the angle between them constant.

5. CIRCUIT DESCRIPTION

5-1 MICRO CONTROLLER CIRCUIT

MICRO Controller

The IC101 contains a 6502 8-bit CPU core, 256 bytes of RAM, 16K bytes of ROM,14 channel 8 bit PWM D/A converters, 2 channel A/D converters for key detection, one 8 bit pre-loadable base timer, internal H-sync and V-sync signals processor providing mode detection, watch- dog timer preventing system from abnormal operation, and an I2C bus interface.

H/V sync signals processor

The functions of the sync processor include polarity detection, H-SYNC & V-SYNC signals counting, Programmable SYNC signals output, free running signal generator. Pin41/Pin42 are for the H-SYNC and V-SYNC input, Pin33/Pin34 will output the same signal as input sync signal without delay, and the polarity are setting in the positive. When no signal input, the Pin33 will output a 61HZ V-SYNC free run signal. The Pin34 will output a 62.5KHz H-SYNC free run signal. for the monitor testing use.

On Screen Display Controller

The IC804 is designed for display the built-in characters or fonts onto monitor screen. The display operation is by transforming data and control information from micro controller to RAM through a serial data interface.
Pin 2 is used to control the internal oscillator frequency by DC voltage input from external low pass filter (R830, C811, R833) and filter (R126, C115) is used to regulate the appropriate bias current for internal oscillator the resonate at specific dot frequency.
Pin5 is input the horizontal fly back pulse, for PLL generator tracking.
Pin6 is left floating, I2C bus is enabled. Otherwise the SPI bus is enabled.
Pin7 the external data transfer through this pin to internal display registers and control registers
Pin8 the clock-input pin is used to synchronize the data transfer.
Pin10 is input the vertical flyback pulse for synchronizing the vertical position.
Pin12 is output a blanking signal to cut off external R.G.B signals of VGA while this chip is displaying characters or windows.
Pin13, Pin14, Pin15 is used to output the OSD (B.G.R) video signal.

5-2 DEFLECTION CIRCUIT

The deflection circuit is achieved by a high performance and efficient solution IC 401 (UPC1888ECT) for this monitor. The concept is fully DC controllable and can be used in applications with a micro-controller solutions.
The UPC1888ECT provides sync. Processing with full auto sync. capability, a flexible SMPS block and an extensive set of geometry control facilities. Further the IC generates the drive waveforms for DC coupled vertical boosters to the TDA9302H .

Horizontal Oscillator

The oscillator is of the relaxation type and requires a capacitor of 390nF C403 at pin 23. The maximum oscillator frequency is determined by a resistor R443 from pin 22 to ground.

PLL2 Phase Detector

This phase detector compares the line flyback pulse at pin 18 with the oscillator saw-tooth voltage. The HFL0 detector thus compensates for the delay in the external H-deflection circuit by adjusting the phase of the HDRV output pulses. The phase between H-flyback and H-sync can be controlled at pin21.

X-ray Protection

The X-ray protection input pin 19 provides a voltage detector with a precise threshold. If the voltage exceeds this threshold for a certain time, an internal latch switches the whole IC into protection mode. In this mode several pins are forced into defined states:
Pin17 (HDRV) is floating
Pin 12 (BDRV) is floating

Vertical Oscillator

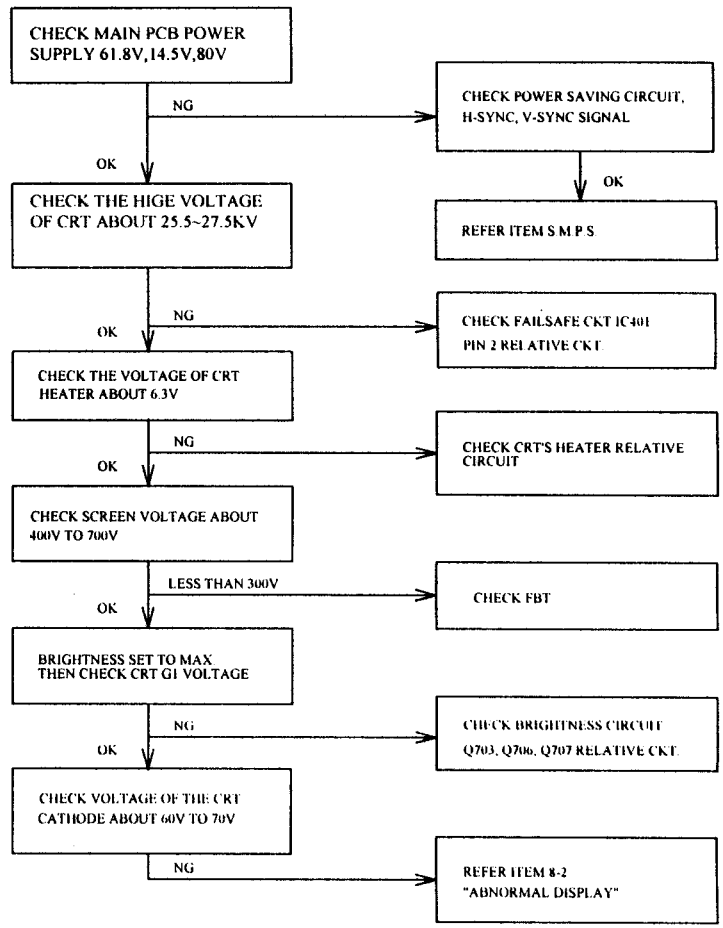
The vertical free - running frequency is determined by the capacitor C604 at pin 2 and resistor R608 at pin20. Usually the free-running frequency should be lower than the minimum trigger frequency.

5-3 TRANSISTOR & DIODE CIRCUIT

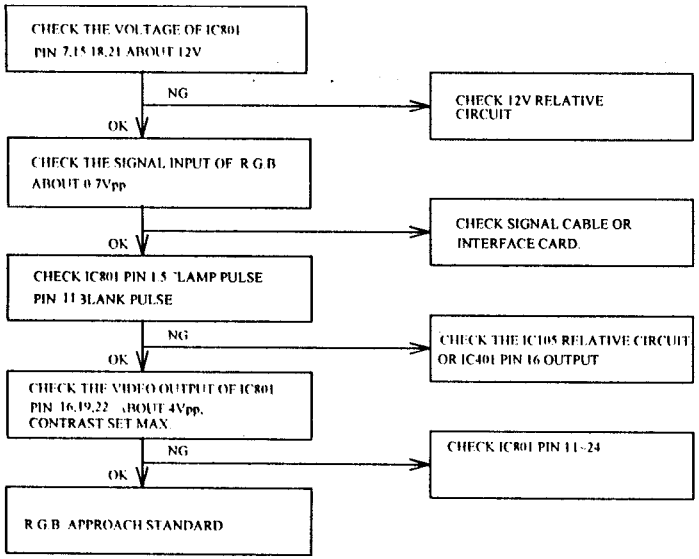
LOCATION	FUNCTION AL DESCRIPTION
D101	For C102 Discharge
D405	Speed up for Q403
D406	Supply a bias for D408
D408	Damping Diode and Modulation Diode
D414~ D416,D418	Buffer Diode for Q412, Q417, Q418, Q420
Q401	B+ Mute Control
Q402	Horizontal Driver
Q403	Horizontal Out Put
Q404, Q406	A differential Amp for Drive Q405
Q405	Darlington Transistor for H-Size Control
Q407	Horizontal Linearity Correction Control
Q410,Q412, Q417,Q418	Horizontal S-Correction Control
D707	Mixing Diode
D704	Rectifier for 250V Supply
D709	Protection Diode for Q708
D706,D708	Rectifier for -200V Supply
Q707	Picture Mute Control AMP
Q703, Q706	Brightness Control CKT
Q708	Vertical Dynamic Focus Control AMP
DB901	Bridge Rectifier for AC Source
D918 ~ D919	Rectifier for Output Voltage Supply
D921 ~ D923	Rectifier for Output Voltage Supply
D924	Clip Diode for Trigger CKT
D925	Rectifier for B+ Supply
D926, D927	Raster Position Control
D939	Clip Diode for Snuffer Pulse
ZD901	Protection Diode
ZD903	Protection Diode
Q911	MOS FET for B+ Control
Q912, Q915	Push Pull Driver for Q911
Q914	Pre-Amplifier for Q912, Q915
Q850 ~ Q852	DC Restoration for CRT Bias Adjustment

6.TROUBLE SHOOTING CHART

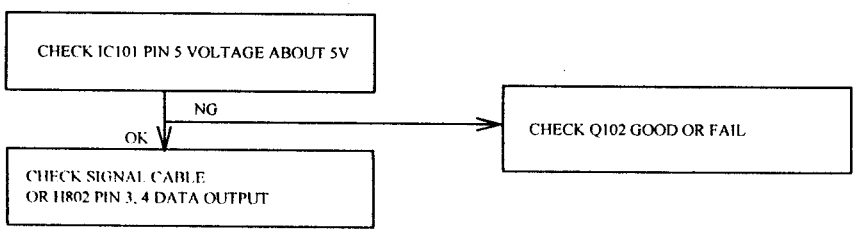
6-1 NO RASTER, CRT RELATIVE CIRCUIT PROBLEMS


CHECK MAIN PCB POWER SUPPLY 61.8V,14.5V,80V
NG
CHECK POWER SAVING CIRCUIT, H-SYNC, V-SYNC SIGNAL
OK
OK
CHECK THE HIGE VOLTAGE OF CRT ABOUT 25.5~27.5KV
REFER ITEM S M P S
NG
OK
CHECK FAILSAFE CKT IC401 PIN 2 RELATIVE CKT
CHECK THE VOLTAGE OF CRT HEATER ABOUT 6.3V
NG
OK
CHECK CRT'S HEATER RELATIVE CIRCUIT
CHECK SCREEN VOLTAGE ABOUT 400V TO 700V
LESS THAN 300V
OK
CHECK FBT
BRIGHTNESS SET TO MAX. THEN CHECK CRT G1 VOLTAGE
NG
OK
CHECK BRIGHTNESS CIRCUIT Q703, Q706, Q707 RELATIVE CKT
CHECK VOLTAGE OF THE CRT CATHODE ABOUT 60V TO 70V
NG
REFER ITEM 8-2 "ABNORMAL DISPLAY"

2.ABNORMAL VIDEO LEVEL ON SCREEN

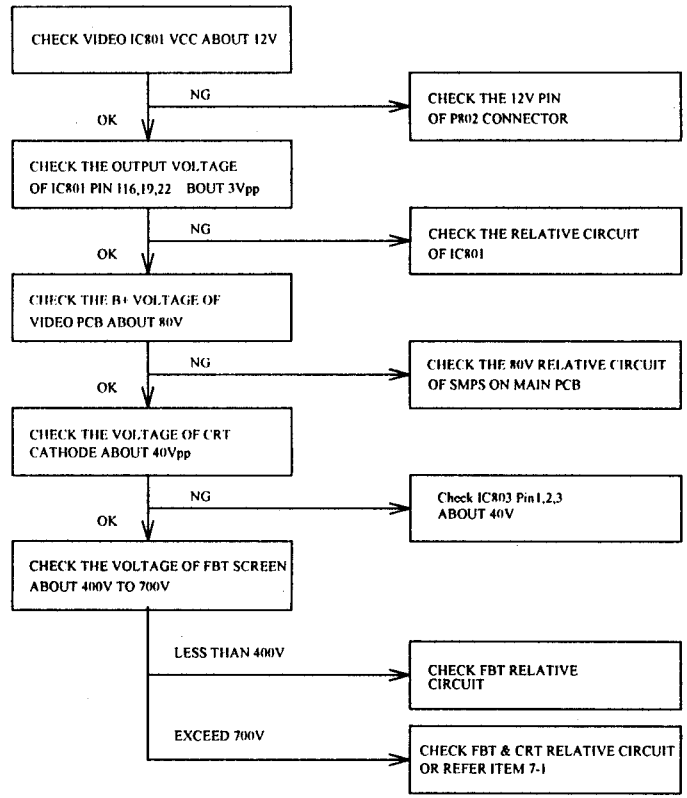


3. ABNORMAL DDC (PLUG & PLAY)

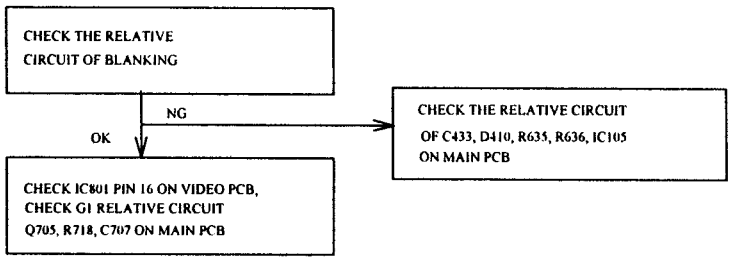


6-2 ABNORMAL DISPLAY

1.NO SIGNAL ON SCREEN

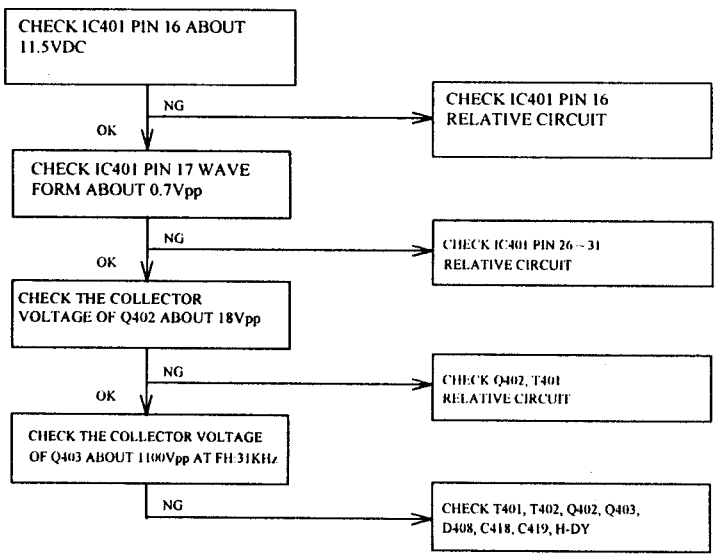


6-3 NO BLANKING



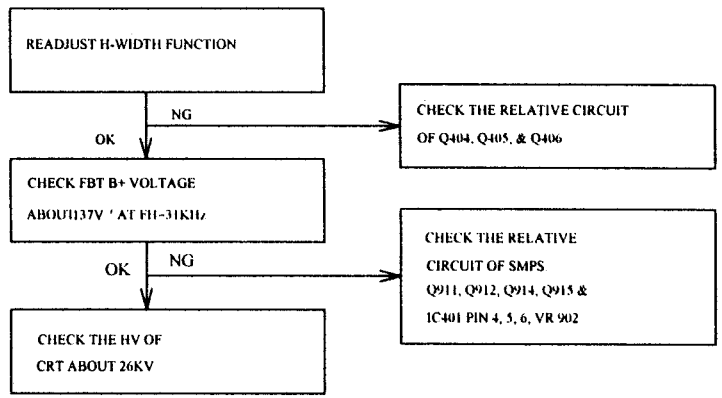
6-4 HOR./OSC/DEF/HV CIRCUIT FAULT

1. NO RASTER (DISCONNECT WITH SIGNAL CABLE)



6-5 ABNORMAL HORIZONTAL DEFLECTION

1. ABNORMAL HORIZONTAL WIDTH OF VIDEO



2. ABNORMAL HORIZONTAL RASTER CENTER

CHECK T903, D926, D927, R964, R968
P403 AND JUMPER

3. ABNORMAL HORIZONTAL VIDEO CENTER

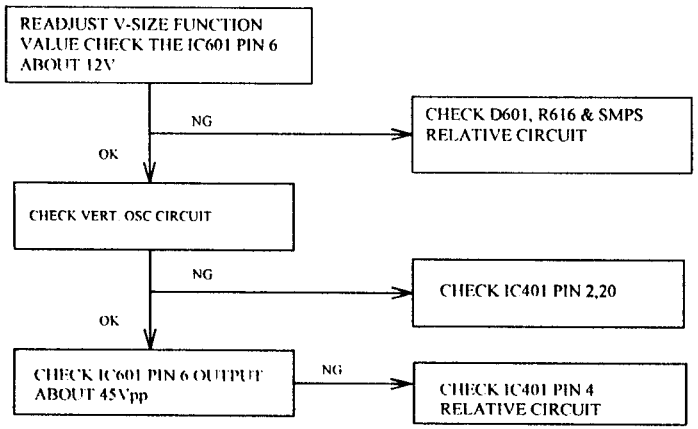
CHECK IC101 PIN 9, 10, IC401 PIN 18, 19

4. ABNORMAL HORIZONTAL LINEARITY

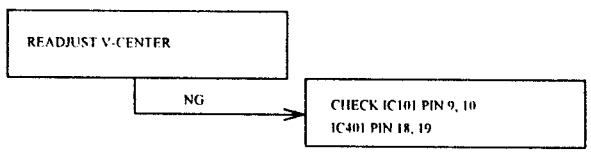
CHECK L401, Q407, Q407, R447, C448 AND IC101
PIN 20,21,22,23 CS SWITHCHER IC403, Q401,
Q412,Q417

6-6 ABNORMAL VERTICAL SCANNING

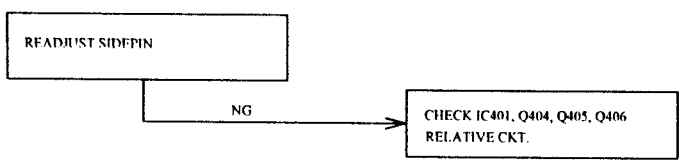
1. ABNORMAL VERTICAL SIZE



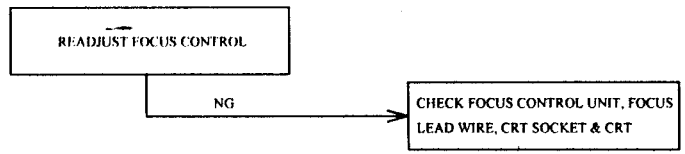
2. VERTICAL CENTER



6-7 SIDE-PIN CUSHION DISTORTION

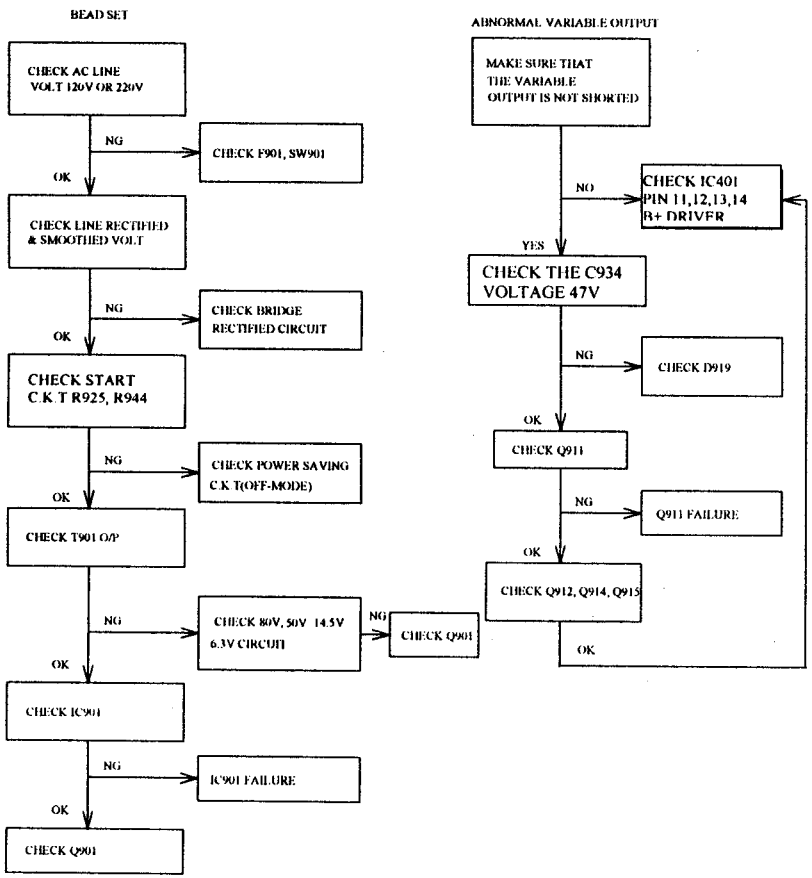


6-8 POOR FOCUS



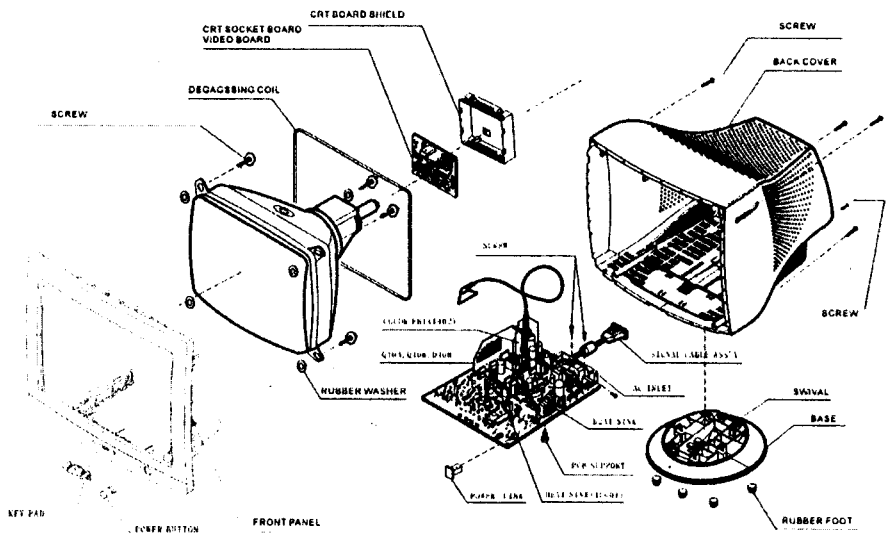
6-10 POWER SUPPLY TROUBLE SHOOTING CHART

BEFORE CHECK SW.REG. PLEASE REFER TO THE POWER SUPPLY BLOCK DIAGRAM
POWER SUPPLY OUTPUT: (A) VARIABLE OUTPUT : 60.5V - 145V
(DEPENDING EPENDING UPON H.SYNC FREQUENCY)
(B) CONSTANT OUTPUT : 6.3V, 14.5V, 55V, 80V



7. MECHANICAL OF CABINET FRONT DIS-ASSEMBLY

S992X-3



8. PARTS LIST OF CABINET

Location	P/N	Specification	Remark
	CMS992X5N	CHASSIS FOR S992X-5	
	1A 503 5T 47	SCREW FOR CRT	
	5A 38501	RUBBER WASHER	
	5A600604075S	CRT WASHER	
	5A600605075S	CRT WASHER	
	11A 112 1	A WIRE MOUNTS	
	11A 112500	WIRE MOUNT	
	11A 115 1	FBT CLIP	
	19A 403 7	STEEL	
	26A 800504 6	BARCODE	
	33A3663 1	CRT SUPPORT	
	33A4020 Y A	S.C.CAP	
	33A4071 Y F	POWER KNOB	
	33A4087 Y F	KEY PAD	
	33A6907 1	LENS	
	34A 741 Y L	BASE	
	34A 748 Y 1F	BACK COVER	
	34A 773 Y L	SWIVEL	
	34A 809 Y 1F	FRONT PAND	
	40A 153 19 2	CRT WARNING LABEL	
	40A 154501 1	HI-POT GND LABEL FOR MON	
	40A 581 26704	FOR CARTON/PALLET	
	40A 58162410A	H/V LABEL	
	40A2054615 1	ID LABEL	
	41A 905615 1A	MANUAL	
	44A3224 1	EPS CUSHION	
	44A3224 2	EPS CUSHION	
	44A3224624 1A	CARTON	
	45A 76 20 RN	PE BAG	
	45A 76 28 RN	PE BAG FOR MANUAL	
	45A 76 34 RN	PE BAG FOR BASE	
	45A 77500	BARCODE RIBBON	
	45A 77501	BARCODE RIBBON	
	50A 500500	CABLE TIE	
	50A 502 2	PLASTIC TIE	
	50A 502 5	CABLE TIE	
	51A 6 4	SILICON	
	52A 1150 C	WHITE TAPE	
	52A 1185	MIDDLE TAPE FOR CARTON	
	52A 1185 1	BIG TAPE	
	52A 1186	SMALL TAPE	
	71A 100 2 S	CORE 8*16*12	
	85A6020 2	Grounded plate	
	85A6027500	SHIELD	
	85A6028500	SHIELD CASE	
	89A402A18N GL	POWER CORD	
	95A2070517	COPPER BRAID	
	95A8013 2	CONNECTOR	
	B1A1035 10128	SCREW 3.5X10	
	D1A1140 7128	SCREW 4X7(FOR AC)	

	Q1A 340 16128	SCREW	
	750A1697 76 JK	0.45*90TS DEG COIL	
AS1	95A205T 3006A	Wire Harness	
CA1	95A2070520	COPPER BRAID	

Location	CMS992X5N	CHASSIS FOR S992X-5	Remark
	AMS992X5N	MAIN BOARD FOR S992X-5	
	CRS992X5N	CRT BOARD FOR S992X-5	
	1A 421 4128	SCREW	
	9A 203 9	PIN	
	11A 141 1	PCB SUPPORT	
	15A5640 1 A	B AL GND LUG	
	15A5659500 2	Rear Bracket	
	40A 581 26702	FAIL-SAFE LABEL	
	40A 581624 2A	CHASSIS LABEL	
	52A6016 4	SPRING PIECE	
	55A 1 4	SOLDER BAR	
	71A 55 2	A FERRITE BEAD 6.5*5*1.7	
	71A 55 2	A FERRITE BEAD 6.5*5*1.7	
	71A 100 9	FERRIRE CORE 28.5*17.5*9	
	89A174A5DN GL	SIGNAL CABLE	
	B1A1040 10128	SCREW 4*10	
	B1A1140 6128	SCREW	
	D1A1140 7128	SCREW 4X7(FOR AC)	
	M1A1140 6128	SCREW	
	705A992XC56 01	IC601/IC903 ASS'Y	
	705A992XC5601A	IC901/Q904 ASS'Y	
	705A992XC5701A	Q403 ASS'Y	
	705A992XC5703A	Q420 ASS'Y	
	705A992XC5704A	Q412 ASS'Y	
	705A992XC87 01	AC IN SOCKET	
	705A992XC93 02	BD901 ASS'Y	
	705A992XC9301A	D921 ASS'Y	
(SW102)	77A 602 1 CJ	TACT SWITCH TSVB-2	
(SW103)	77A 602 1 CJ	TACT SWITCH TSVB-2	
(SW104)	77A 602 1 CJ	TACT SWITCH TSVB-2	
(SW105)	77A 602 1 CJ	TACT SWITCH TSVB-2	
AA	95A 202 59032	A UL1007#22/WHT SOLID	
BB	95A 205 30032	A 95A205-30 L:3"	
C103	67A 305471 3T	470UF +-20% 16V	
C411	67A 309331 3T	330UF +-20% 16V	
C414	67A 305470 9	47UF +-20% 100V	
C428	63A210J1227CM	1.2NF/1600V	
C431	64A100J225 59	2.2UF/100V MEF	
C432	67A 215470 12	47UF +-20% 250V	
C458	63A210J1242CC	0.12UF 250V	

Location	CMS992X5N	CHASSIS FOR S992X-5	Remark
C465	67A 30547910T	4.7UF 160V	
C607	67A 305221 6	220UF +-20% 35V	
C608	67A 305102 4	1000UF +-20% 25V	
C612	67A 305102 3	1000 UF +-20% 16V	

C703	67A 305109 15	1UF +-20% 450V	
C713	67A 305100 12	10UF +-20% 250V	
C719	64A178J824 1A	.82UF 100V	
C900	65A305M4722B2	4700PF +-20% 400VAC ACFY	
C902	63A107K474 U	CAP SAFETY 0.47U 20% AC2	
C903	65A305M4722B2	4700PF +-20% 400VAC ACFY	
C904	65A305M4722B2	4700PF +-20% 400VAC ACFY	
C907	67A 3015115K	150UF+-20% 450V	
C913	63A210J6844MC	0.68UF 630V	
C915	65A 2M103 3B	0.01UF 2KV 20% Z5U	
C917	67A 305102 3	1000 UF +-20% 16V	
C931	67A 305101 7T	100UF +-20% 50V	
C934	67A 215391GFK	390UF +-20% 80V ELITE	
C936	67A 305102 6	1000UF +-20% 35V	
C937	67A 305102 3	1000 UF +-20% 16V	
C939	67A 305102 3	1000 UF +-20% 16V	
C999	63A 107224 HS	INTERFERENCE SUPPRESSORS	
CN902	33A3074 1	2P PLUG	
D907	93A3060500	RG4A SANKEN	
D912	93A3020 8T	RG-4Z	
D922	93A3020 8T	RG-4Z	
D923	93A3020 8T	RG-4Z	
D925	93A 6073F	31DF4-FC	
DF907	71A 55 2	A FERRITE BEAD 6.5*5*1.7	
DF912	71A 55 2	A FERRITE BEAD 6.5*5*1.7	
DF923	71A 55 2	A FERRITE BEAD 6.5*5*1.7	
DF925	71A 55 2	A FERRITE BEAD 6.5*5*1.7	
F901	84A 33 10	FUSE CLIP	
F901	84A 41 4	FUSE 4A 250V LF-215 004	
FBTF	71A 100 8	FERRITE CORE 12*25*15	
GND2	9A 203 8	BRASS PIN	
GND3	9A 203 8	BRASS PIN	
H802	95A8014 14501	HARNESS	
HS3	95A2070514	WIRE HARNESS	
IC101	56A1125100 X	NT68P61AU	
IC102	56A1133 14	AT24C08-10PC	
IC401	56A 552 5	IC UPC1888ECT	
IC902	56A 538 5	MC33260P	
IC904	56A 139 3	A PC123FY2 BY SHARP	
J007	95A 90 23	TIN COATED	
J078	61A152M478 64	MOFR 0.47 OHM+-5% 2W	
J098	73A 5347810T	0.47UH 10%	
J134	73A 259 4	200UH +/-5%	
L401	73A 147514 H	LINEARITY COIL	
Location	**CMS992X5N**	**CHASSIS FOR S992X-5**	**Remark**
L404	73A 253122 H	CHOKE COIL	
L901	73A 174 2 HA	LINE FILTER	
L902	73A 174 17 G	LINE FITTER	
L904	73A 253121 H	125UH +-10%	
LED2	81A 11 7 GP	GP32052CE/DIY-ZY	
NR901	61A 58 8T L	NTCR 15OHM+-15%2.5A THIN	

P106	33A3278 7A	7P PLUG	
P402	33A3192 4	4P PLUG	
P701	33A3803 3	WAFER EH-E	
P901	33A8009 3	3 PIN PLUG	
P903	33A8009 3	3 PIN PLUG	
PR901	61A 52 27 4W	PTCR 9OHM+-20% 220V WALS	
Q402	57A 600 28	IRF630B	
Q417	57A 610 2	IRF640B	
Q418	57A 600 21	IRF630M/S.T	
R426	61A153M101 59	MOFR 100 OHM +-5% 3W	
R427	61A 208220 64	MOFR 22 OHM +-5% 1W	
R428	61A155M189 61	MOFR 1.8 OHM+-5% 5W	
R429	61A 208820 64	MOFR 82 OHM +-5% 1W	
R430	61A153M121 59	MOFR 120 OHM+-5% 3W	
R451	61A152M820 64	MOFR 82 OHM+-5% 2W	
R456	61A153M101 59	MOFR 100 OHM +-5% 3W	
R457	61A152M150 64	MOFR 15 OHM+-5% 2W	
R475	61A153M189 59	MOFR 1.8 OHM +-5% 3W	
R632	61A152M689 64	MOFR 6.8 OHM+-5% 2W	
R635	61A152M689 64	MOFR 6.8 OHM+-5% 2W	
R723	61A152M121 64	MOFR 120 OHM+-5% 2W	
R743	61A152M101 64	MOFR 100OHM+-5% 2W	
R903	61A152M683 64	MOFR 68KOHM +-5% 2W	
R907	61A 20K478GC1	CEMENTR 0.47 OHM +-10% 3	
R920	61A152M188 64	MOFR 0.18 OHM 2W+-5%	
R927	61A153M333 59	MOFR 33K OHM +-5% 3W	
R939	61A153M222 59	MOFR 2.2K OHM+-5% 3W	
R955	61A 301228 64	FUSER 0.22OHM +-5% 1/2W	
R964	61A152M100 64	MOFR 10 OHM+-5% 2W	
R968	61A152M100 64	MOFR 10 OHM+-5% 2W	
R979	61A153M181 59	MOFR 180 OHM +-5% 3W	
RY401	77A 260 5 2W	RELAY OSA-SS-212DM5	
RY901	77A 260 5 2W	RELAY OSA-SS-212DM5	
SG701	62A 10152 J	SPARK GAP 1.5KV+-20% JIN	
SW901	77A411A 2 S	PUSH SWITCH	
T401	79A 167118 H	DRIVER X'FMR	
T402	79A 790 1 AL	FBT	
T701	79A 167112 GA	FOCUS COUPLING COIL	
T901	80A 792 2 L	X'FMR BY LI TAI	
T903	79A 167120 H	DRIVER X'FMR	
TP701	9A 211 2	PIN 1.2X15MM	
TP702	9A 211 2	PIN 1.2X15MM	
Location	**CMS992X5N**	**CHASSIS FOR S992X-5**	**Remark**
VR701	75A 335223	CFVR 22K OHM +-20%	
VR702	75A 335204	CFVR 200K OHM +-20%	
VR703	75A 335104	CFVR 100K OHM +-20%	
VR902	75A 334303	CFVR 30K OHM +-20%	
X101	93A 22 22 PT	HC-49U 8MHz Crystal	

Location	**AMS992X 5N**	**MAIN BOARD FOR S992X-5 M**	**Remark**
	6A 31 4	BRASS	

	6A 31 4	BRASS	
	6A 31500	EYELET	
	6A 31501	BRASS	
	6A 31501	BRASS	
	6A 31502	BRASS	
	6A 31502	BRASS	
	6A 31502	BRASS	
	95A 90 23	TIN COATED	
	715A 868 O 3	MPCB	
(J201)	95A 90 23	TIN COATED	
(R102)	61A 60227252T	CFR 2.7K OHM+-5% 1/6W	
(R103)	61A 60239252T	CFR 3.9K OHM+-5% 1/6W	
(R104)	61A 60268252T	CFR 6.8K OHM+-5% 1/6W	
C101	65A 450104 7T	0.1UF +80-20% 50V Y5V	
C102	67A 309330 3T	33UF +-20% 16V	
C105	67A 309100 7T	10UF +-20% 50V	
C107	67A 305100 7T	10UF +-20% 50V	
C108	65A 44222113T	220PF +-5% NPO 50V	
C117	67A 309221 3T	220UF +-20% 16V	
C127	67A 309100 7T	10UF +-20% 50V	
C130	67A 309100 7T	10UF +-20% 50V	
C131	64A700J1030AT	0.01UF 50V +-5%	
C132	67A 309100 7T	10UF +-20% 50V	
C137	65A 44210113T	100PF +-5% NPO 50V	
C138	65A 44210113T	100PF +-5% NPO 50V	
C401	67A 309109 7T	1.0UF +-20% 50V	
C402	64A700J1020AT	PEN 0.001UF/50V +-5%	
C403	64A 45G3911AT	390PF 100V +-2%	
C404	67A 309109 7T	1.0UF +-20% 50V	
C405	67A 70229 9T	2.2UF +-20% 100V	
C406	64A700J3330AT	0.033UF 63V +-5%	
C407	64A176J102 1T	.001UF +-5% 100V	
C408	64A178J104 2T	.1UF 250V	
C409	67A 309479 7T	4.7UF +-20% 50V	
C410	65A 442470 9T	47pF/50V SL	
C412	65A 44222113T	220PF +-5% NPO 50V	
C413	67A 305339 7T	3.3UF +-20% 50V	
C415	65A517K102 5T	1000PF 500V +-10% Y5P	
C416	64A176J103 1T	0.01UF 5% 100V	
C417	64A701J1540AT	0.15UF 50V +-5%	
Location	**AMS992X 5N**	**MAIN BOARD FOR S992X-5 M**	**Remark**
C420	64A178J223 1T	CL21X 0.022UF 100V +-5%	
C421	65A 444102 5T	1000 PF 10% 50V Y5P	
C422	65A 444101 5T	100 PF 10% 50V Y5P	
C423	65A 450104 7T	0.1UF +80-20% 50V Y5V	
C424	67A 309100 7T	10UF +-20% 50V	
C426	65A 444101 5T	100 PF 10% 50V Y5P	
C427	67A 70229 9T	2.2UF +-20% 100V	
C430	65A 2K331 5T	330 PF 2KV +-10%	
C433	64A701J2240AT	0.22uF/50V +-5%	
C434	67A 309109 7T	1.0UF +-20% 50V	

C435	65A 444102 5T	1000 PF 10% 50V Y5P	
C436	67A 305479 7T	4.7UF +-20% 50V	
C437	67A 309109 7T	1.0UF +-20% 50V	
C440	67A 305229 7T	2.2UF +-20% 50V	
C441	67A 309109 7T	1.0UF +-20% 50V	
C442	67A 309100 7T	10UF +-20% 50V	
C443	65A517K472 1T	4700P/500V	
C444	65A 444681 5T	680PF 10% 50V Y5P	
C445	65A 44410313T	10000PF +-10% Z5P 50V	
C446	65A 44215113T	150PF +-5% NPO 50V	
C447	67A 309109 7T	1.0UF +-20% 50V	
C448	65A 444152 5T	1500PF 10% Y5P 50V	
C451	65A 1K101 2T	100PF 1KV Z5P	
C452	67A 309330 3T	33UF +-20% 16V	
C454	67A 305109 7T	1UF +-20% 50V	
C455	67A 309109 7T	1.0UF +-20% 50V	
C456	64A178J104 0T	CL21X0.1UF 63V +-5%	
C457	65A 44447113T	470PF +-10% Z5P 50V	
C459	65A 444101 5T	100 PF 10% 50V Y5P	
C460	65A 44210113T	100PF +-5% NPO 50V	
C461	67A 309479 7T	4.7UF +-20% 50V	
C462	65A 44210113T	100PF +-5% NPO 50V	
C464	65A 444101 5T	100 PF 10% 50V Y5P	
C467	67A 309100 9T	10UF +-20% 100V	
C468	65A 44222113T	220PF +-5% NPO 50V	
C481	67A 309101 4T	100UF +-20% 25V	
C601	64A178J103 1T	CL21X 0.01UF 100V +-5%	
C602	64A176J102 1T	.001UF +-5% 100V	
C603	67A 309330 3T	33UF +-20% 16V	
C604	64A176J333 1T	.033UF +-5% 100V	
C605	65A 44447113T	470PF +-10% Z5P 50V	
C606	65A 444101 5T	100 PF 10% 50V Y5P	
C610	67A 309109 7T	1.0UF +-20% 50V	
C611	64A176J224 1T	0.22UF +-5% 100V	
C613	65A 444103 5T	0.01 UF 10% 50V Y5P	
C614	64A176J224 1T	0.22UF +-5% 100V	
C615	65A 444103 5T	0.01 UF 10% 50V Y5P	
C616	65A 444102 5T	1000 PF 10% 50V Y5P	
Location	**AMS992X 5N**	**MAIN BOARD FOR S992X-5 M**	**Remark**
C701	67A 309100 7T	10UF +-20% 50V	
C702	65A 1K471 2T	470PF/1KV Y5P+-10%	
C704	67A 309100 7T	10UF +-20% 50V	
C705	64A178J103 1T	CL21X 0.01UF 100V +-5%	
C706	67A 309470 7T	47UF +-20% 50V	
C707	64A178J104 2T	.1UF 250V	
C708	67A 309100 7T	10UF +-20% 50V	
C710	67A 215478 7T	0.47UF +-20% 50V	
C711	65A 444102 5T	1000 PF 10% 50V Y5P	
C714	64A178J153 1T	MPE 0.015UF, 100V +-5%	
C717	65A 450104 7T	0.1UF +80-20% 50V Y5V	
C720	65A 44410213T	1000PF +-10% Y5P 50V	

C730	65A 450104 7T	0.1UF +80-20% 50V Y5V
C901	67A 309100 7T	10UF +-20% 50V
C905	67A 309100 7T	10UF +-20% 50V
C906	67A 309109 7T	1.0UF +-20% 50V
C909	67A 309109 7T	1.0UF +-20% 50V
C910	65A 44222113T	220PF +-5% NPO 50V
C911	64A701J2240AT	0.22uF/50V +-5%
C912	65A 444102 5T	1000 PF 10% 50V Y5P
C916	67A 70109 9T	1UF +-20% 100V
C918	67A 305100 7T	10UF +-20% 50V
C919	65A 44210013T	10PF +-5% NPO 50V
C920	67A 309470 7T	47UF +-20% 50V
C921	65A 450104 7T	0.1UF +80-20% 50V Y5V
C922	65A517M103 3T	10NF/500V Z5U +-20%
C923	65A 444471 5T	470PF 10% 50V Y5P
C927	65A 44233013T	33PF +-5% NPO 50V
C930	67A 305470 7T	47UF +-20% 50V
C935	67A 305470 7T	47UF +-20% 50V
C941	64A700J1040AT	0.1uF/50V +-5%
C942	65A 442470 9T	47pF/50V SL
C943	65A 44210113T	100PF +-5% NPO 50V
C944	67A 309100 7T	10UF +-20% 50V
C950	65A 1K221 2T	220PF/1KV Z5P+-10%
C955	65A517K471 1T	470PF/500 Z5F +-10%
C957	64A700J3330AT	0.033UF 63V +-5%
C958	64A176J102 1T	.001UF +-5% 100V
C959	64A178J104 0T	CL21X0.1UF 63V +-5%
D101	93A 64 1152T	DIODE 1N4148
D104	93A 64 1152T	DIODE 1N4148
D105	93A 64 1152T	DIODE 1N4148
D106	95A 90 23	TIN COATED
D109	93A 64 1152T	DIODE 1N4148
D401	93A 6038T52T	FR103
D402	93A 6450152T	SWITCHING DIODE BAV21
D403	93A 64 1152T	DIODE 1N4148
D404	93A1040 252T	F.R.D UF4004/GIT

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
D405	93A1002 1W52T	1N5817	
D406	93A1060 652T	F R D BYV26C	
D407	93A 64 1152T	DIODE 1N4148	
D409	93A 64 1152T	DIODE 1N4148	
D410	93A 6450152T	SWITCHING DIODE BAV21	
D411	93A 64 1152T	DIODE 1N4148	
D413	93A 64 1152T	DIODE 1N4148	
D414	93A 6021W52T	FR155/WILLAS	
D415	93A 6021W52T	FR155/WILLAS	
D416	93A 6021W52T	FR155/WILLAS	
D419	93A 6021W52T	FR155/WILLAS	
D421	93A 5247P52T	1N4004	
D422	93A 5247P52T	1N4004	
D423	93A 5247P52T	1N4004	

D424	93A 5247P52T	1N4004
D425	93A1060 652T	F R D BYV26C
D430	93A 64 1152T	DIODE 1N4148
D601	93A 5247P52T	1N4004
D602	93A 64 1152T	DIODE 1N4148
D603	95A 90 23	TIN COATED
D703	95A 90 23	TIN COATED
D704	93A1060 652T	F R D BYV26C
D705	93A 6021W52T	FR155/WILLAS
D706	93A1060 652T	F R D BYV26C
D707	93A 64 1152T	DIODE 1N4148
D708	93A1060 652T	F R D BYV26C
D709	93A 64 1152T	DIODE 1N4148
D710	93A 64 1152T	DIODE 1N4148
D901	93A 64 1152T	DIODE 1N4148
D902	93A 64 1152T	DIODE 1N4148
D903	93A 64 1152T	DIODE 1N4148
D904	93A 64 1152T	DIODE 1N4148
D905	93A1040 252T	F.R.D UF4004/GIT
D906	93A 6431G52T	BAV20
D908	93A 64 1152T	DIODE 1N4148
D909	93A 64 1152T	DIODE 1N4148
D910	93A1060 652T	F R D BYV26C
D913	93A 64 1152T	DIODE 1N4148
D916	93A 64 1152T	DIODE 1N4148
D917	93A 64 1152T	DIODE 1N4148
D919	93A1060 652T	F R D BYV26C
D920	93A 64 1152T	DIODE 1N4148
D924	93A 64 1152T	DIODE 1N4148
D926	93A 6038P52T	PS102R
D927	93A 6038P52T	PS102R
D939	93A 64 1152T	DIODE 1N4148
FB901	95A 90 23	TIN COATED
FB902	71A 55 7 T	FERRITE BEAD 9*3.5*0.62

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
FB903	71A 55 9 T	C CORE RF BEAD RH 3.5X6X0.	
FB904	95A 90 23	TIN COATED	
FB905	71A 55 19 T	FERRITE BEAD 9X3.5X0.8	
J001	95A 90 23	TIN COATED	
J002	95A 90 23	TIN COATED	
J003	95A 90 23	TIN COATED	
J004	95A 90 23	TIN COATED	
J005	95A 90 23	TIN COATED	
J008	95A 90 23	TIN COATED	
J009	95A 90 23	TIN COATED	
J010	95A 90 23	TIN COATED	
J011	95A 90 23	TIN COATED	
J012	95A 90 23	TIN COATED	
J015	95A 90 23	TIN COATED	
J016	95A 90 23	TIN COATED	
J017	95A 90 23	TIN COATED	

J018	95A 90 23	TIN COATED
J019	95A 90 23	TIN COATED
J020	95A 90 23	TIN COATED
J021	95A 90 23	TIN COATED
J022	95A 90 23	TIN COATED
J023	95A 90 23	TIN COATED
J024	95A 90 23	TIN COATED
J025	95A 90 23	TIN COATED
J026	95A 90 23	TIN COATED
J027	95A 90 23	TIN COATED
J028	95A 90 23	TIN COATED
J029	95A 90 23	TIN COATED
J030	95A 90 23	TIN COATED
J031	95A 90 23	TIN COATED
J032	95A 90 23	TIN COATED
J033	95A 90 23	TIN COATED
J034	95A 90 23	TIN COATED
J035	95A 90 23	TIN COATED
J036	95A 90 23	TIN COATED
J037	95A 90 23	TIN COATED
J039	95A 90 23	TIN COATED
J040	95A 90 23	TIN COATED
J041	95A 90 23	TIN COATED
J042	95A 90 23	TIN COATED
J043	95A 90 23	TIN COATED
J044	95A 90 23	TIN COATED
J045	95A 90 23	TIN COATED
J046	95A 90 23	TIN COATED
J047	95A 90 23	TIN COATED
J048	95A 90 23	TIN COATED
J049	95A 90 23	TIN COATED
J050	95A 90 23	TIN COATED

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
J051	95A 90 23	TIN COATED	
J052	95A 90 23	TIN COATED	
J053	95A 90 23	TIN COATED	
J054	95A 90 23	TIN COATED	
J055	95A 90 23	TIN COATED	
J056	95A 90 23	TIN COATED	
J057	95A 90 23	TIN COATED	
J058	95A 90 23	TIN COATED	
J059	95A 90 23	TIN COATED	
J060	95A 90 23	TIN COATED	
J061	95A 90 23	TIN COATED	
J062	95A 90 23	TIN COATED	
J063	95A 90 23	TIN COATED	
J064	95A 90 23	TIN COATED	
J065	95A 90 23	TIN COATED	
J066	95A 90 23	TIN COATED	
J067	95A 90 23	TIN COATED	
J068	95A 90 23	TIN COATED	

J069	95A 90 23	TIN COATED
J070	95A 90 23	TIN COATED
J071	95A 90 23	TIN COATED
J072	95A 90 23	TIN COATED
J073	95A 90 23	TIN COATED
J074	95A 90 23	TIN COATED
J075	95A 90 23	TIN COATED
J076	95A 90 23	TIN COATED
J077	95A 90 23	TIN COATED
J079	95A 90 23	TIN COATED
J080	95A 90 23	TIN COATED
J081	95A 90 23	TIN COATED
J082	95A 90 23	TIN COATED
J083	95A 90 23	TIN COATED
J084	95A 90 23	TIN COATED
J085	95A 90 23	TIN COATED
J086	95A 90 23	TIN COATED
J087	95A 90 23	TIN COATED
J088	95A 90 23	TIN COATED
J089	95A 90 23	TIN COATED
J090	95A 90 23	TIN COATED
J091	95A 90 23	TIN COATED
J092	95A 90 23	TIN COATED
J093	95A 90 23	TIN COATED
J094	95A 90 23	TIN COATED
J095	95A 90 23	TIN COATED
J096	95A 90 23	TIN COATED
J097	95A 90 23	TIN COATED
J099	95A 90 23	TIN COATED
J100	95A 90 23	TIN COATED

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
J102	95A 90 23	TIN COATED	
J103	95A 90 23	TIN COATED	
J104	95A 90 23	TIN COATED	
J105	95A 90 23	TIN COATED	
J106	95A 90 23	TIN COATED	
J107	95A 90 23	TIN COATED	
J108	95A 90 23	TIN COATED	
J109	95A 90 23	TIN COATED	
J110	95A 90 23	TIN COATED	
J111	95A 90 23	TIN COATED	
J112	95A 90 23	TIN COATED	
J113	95A 90 23	TIN COATED	
J114	95A 90 23	TIN COATED	
J115	95A 90 23	TIN COATED	
J116	95A 90 23	TIN COATED	
J117	95A 90 23	TIN COATED	
J118	95A 90 23	TIN COATED	
J119	95A 90 23	TIN COATED	
J120	95A 90 23	TIN COATED	
J121	95A 90 23	TIN COATED	

J122	95A 90 23	TIN COATED
J123	95A 90 23	TIN COATED
J124	95A 90 23	TIN COATED
J125	95A 90 23	TIN COATED
J126	95A 90 23	TIN COATED
J127	95A 90 23	TIN COATED
J128	95A 90 23	TIN COATED
J129	95A 90 23	TIN COATED
J130	95A 90 23	TIN COATED
J131	95A 90 23	TIN COATED
J132	95A 90 23	TIN COATED
J133	95A 90 23	TIN COATED
J135	95A 90 23	TIN COATED
J136	95A 90 23	TIN COATED
J139	95A 90 23	TIN COATED
J140	95A 90 23	TIN COATED
J141	95A 90 23	TIN COATED
J142	95A 90 23	TIN COATED
J146	95A 90 23	TIN COATED
L101	73A 5433910T	3.3UH+-10% RF COATED CHO
L403	61A 60210152T	CFR 100 OHM+-5% 1/6W
L405	73A 5410110T	100UH +-10%
NR401	61A 58101 UT	NTCR100OHM+-15%3100K UPP
NR601	61A 58801 UT	NTCR800OHM+-15%3712K UPP
Q102	57A 446501 T	2SC2120Y
Q401	57A 419 P T	TRAN 2SC945P/NEC TAPING
Q404	57A 420 P T	TRAN 2SA733P/NEC TAPING
Q406	57A 420 P T	TRAN 2SA733P/NEC TAPING

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
Q407	57A 446 1 T	TRAN.2SC1213AC/HITACHI	
Q408	57A 420 P T	TRAN 2SA733P/NEC TAPING	
Q409	57A 420 P T	TRAN 2SA733P/NEC TAPING	
Q410	57A 419 P T	TRAN 2SC945P/NEC TAPING	
Q411	57A 419 P T	TRAN 2SC945P/NEC TAPING	
Q413	57A 419 P T	TRAN 2SC945P/NEC TAPING	
Q414	57A 419 P T	TRAN 2SC945P/NEC TAPING	
Q419	57A 419 P T	TRAN 2SC945P/NEC TAPING	
Q427	57A 721 1 T	DTC114ESA	
Q428	57A 419 P T	TRAN 2SC945P/NEC TAPING	
Q429	57A 419 P T	TRAN 2SC945P/NEC TAPING	
Q701	57A 521 1 T	2SD667AC	
Q702	57A 420 P T	TRAN 2SA733P/NEC TAPING	
Q703	57A 420 P T	TRAN 2SA733P/NEC TAPING	
Q704	57A 446 1 T	TRAN.2SC1213AC/HITACHI	
Q705	57A 419502 T	3DG1815Y	
Q706	57A 498 1 T	TRAN BF423 TAPING PHILIP	
Q707	57A 721 1T	DTC114ES	
Q708	57A 493 12 T	BF420	
Q709	57A 419 P T	TRAN 2SC945P/NEC TAPING	
Q901	57A 717 1 T	BF488	
Q905	57A 420 P T	TRAN 2SA733P/NEC TAPING	

Q906	57A 420 P T	TRAN 2SA733P/NEC TAPING
Q907	57A 419 P T	TRAN 2SC945P/NEC TAPING
Q912	57A 446 1 T	TRAN.2SC1213AC/HITACHI
Q913	57A 419 P T	TRAN 2SC945P/NEC TAPING
Q914	57A 419 P T	TRAN 2SC945P/NEC TAPING
Q915	57A 619 1A T	2SA673A-C
R101	61A 60256252T	CFR 5.6KOHM+-5% 1/6W
R105	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R107	61A 60210352T	CFR 10K OHM+-5% 1/6W
R108	61A 60210152T	CFR 100 OHM+-5% 1/6W
R109	61A 60210152T	CFR 100 OHM+-5% 1/6W
R111	61A 60222252T	CFR 2.2K OHM +-5% 1/6W
R112	61A 17210152T	CFR 100OHM+-5% 1/4W
R113	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R115	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R117	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R118	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R119	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R120	61A 60210152T	CFR 100 OHM+-5% 1/6W
R121	61A 60210152T	CFR 100 OHM+-5% 1/6W
R122	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R123	61A 60210152T	CFR 100 OHM+-5% 1/6W
R124	61A 60210152T	CFR 100 OHM+-5% 1/6W
R126	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R130	61A 60210152T	CFR 100 OHM+-5% 1/6W
R131	95A 90 23	TIN COATED

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
R132	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R135	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R136	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R137	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R138	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R140	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R141	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R142	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R143	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R144	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R145	61A 17215252T	CFR 1.5K OHM +-5% 1/4W	
R164	61A 17210952T	CFR 1 OHM +-5% 1/4W	
R167	61A 60210552T	CFR 1M OHM+-5% 1/6W	
R168	61A 60210552T	CFR 1M OHM+-5% 1/6W	
R401	61A 60218252T	CFR 1.8K OHM+-5% 1/6W	
R402	61A 60291352T	CFR 91K OHM +-5% 1/6W	
R403	95A 90 23	TIN COATED	
R404	61A 17247452T	CFR 470K OHM +-5% 1/4W	
R405	61A175L10452T	CFR 100K OHM +-5% 1/2W	
R406	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R407	61A 60275252T	CFR 7.5K OHM +-5% 1/6W	
R408	61A 17215252T	CFR 1.5K OHM +-5% 1/4W	
R409	61A 17222352T	CFR 22KOHM+-5% 1/4W	
R410	61A 60210252T	CFR 1K OHM+-5% 1/6W	

R411	61A 17210552T	CFR 1MOHM +-5% 1/4W
R412	61A 60291252T	CFR 9.1K OHM +-5% 1/6W
R413	61A 21022352T	MFR 22K OHM +- 1% 1/6W
R414	61A 60210252T	CFR 1K OHM+-5% 1/6W
R415	61A 60222352T	CFR 22K OHM+-5% 1/6W
R416	61A 60213352T	CFR 13K OHM +-5% 1/6W
R417	61A 60222352T	CFR 22K OHM+-5% 1/6W
R418	61A 60251252T	CFR 5.1K OHM+-5% 1/6W
R419	61A 60239352T	CFR 39K OHM +-5% 1/6W
R420	61A 60210352T	CFR 10K OHM+-5% 1/6W
R421	61A 17215252T	CFR 1.5K OHM +-5% 1/4W
R422	61A 17215452T	CFR 150K OHM +-5% 1/4W
R423	61A 17210252T	CFR 1KOHM +-5% 1/4W
R424	61A 60210052T	CFR 10 OHM +-5% 1/6W
R425	61A175L47252T	CFR 4.7K OHM +-5% 1/2W
R431	61A 60210352T	CFR 10K OHM+-5% 1/6W
R432	61A 60227352T	CFR 27K OHM+-5% 1/6W
R433	61A 60222252T	CFR 2.2K OHM +-5% 1/6W
R434	61A 21027352T	MFR 27K OHM +- 1% 1/6W
R435	61A 21068252T	MFR 6.8KOHM +-1% 1/6W
R436	61A214Y20452T	MGFR 200K OHM +-5% 1/4W
R437	61A 17215252T	CFR 1.5K OHM +-5% 1/4W
R438	61A 17215252T	CFR 1.5K OHM +-5% 1/4W
R440	61A 17215252T	CFR 1.5K OHM +-5% 1/4W

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
R441	61A 60256352T	CFR 56K OHM +-5% 1/6W	
R442	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R443	61A 21013252T	MFR 1.3K OHM +- 1% 1/6W	
R444	61A 60222252T	CFR 2.2K OHM +-5% 1/6W	
R445	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R446	61A 17215452T	CFR 150K OHM +-5% 1/4W	
R447	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R448	61A 60256352T	CFR 56K OHM +-5% 1/6W	
R449	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R450	61A 60247452T	CFR 470K OHM+-5% 1/6W	
R452	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R453	61A 60222252T	CFR 2.2K OHM +-5% 1/6W	
R454	95A 90 23	TIN COATED	
R455	61A 60233252T	CFR 3.3K OHM+-5% 1/6W	
R458	61A 60230352T	CFR 30K OHM+-5% 1/6W	
R459	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R460	61A 17215452T	CFR 150K OHM +-5% 1/4W	
R461	61A 60256352T	CFR 56K OHM +-5% 1/6W	
R462	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R463	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R464	61A 60256352T	CFR 56K OHM +-5% 1/6W	
R465	61A 60216352T	CFR 16K OHM +-5% 1/6W	
R466	61A 60233352T	CFR 33K OHM+-5% 1/6W	
R467	61A 60233352T	CFR 33K OHM+-5% 1/6W	
R468	61A 60233352T	CFR 33K OHM+-5% 1/6W	
R469	61A 60233352T	CFR 33K OHM+-5% 1/6W	

R470	61A 60222252T	CFR 2.2K OHM +-5% 1/6W
R471	61A 21062152T	MFR 620OHM +-1% 1/6W
R472	61A 17215452T	CFR 150K OHM +-5% 1/4W
R474	61A 60210352T	CFR 10K OHM+-5% 1/6W
R477	61A 60291352T	CFR 91K OHM +-5% 1/6W
R478	61A 60222252T	CFR 2.2K OHM +-5% 1/6W
R479	61A 60233252T	CFR 3.3K OHM+-5% 1/6W
R480	61A175L10052T	CFR 10 OHM +-5% 1/2W
R482	61A 60210252T	CFR 1K OHM+-5% 1/6W
R483	61A 60247152T	CFR 470 OHM +-5% 1/6W
R485	61A 21020152T	MFR 200OHM +-1% 1/6W
R488	61A 60210052T	CFR 10 OHM +-5% 1/6W
R489	61A 60210052T	CFR 10 OHM +-5% 1/6W
R493	61A 60210052T	CFR 10 OHM +-5% 1/6W
R494	61A 60210052T	CFR 10 OHM +-5% 1/6W
R497	61A175L22552T	CFR 2.2MOHM+-5% 1/2W
R604	61A 21047152T	MFR 470 OHM +-1% 1/6W
R606	61A 60268252T	CFR 6.8K OHM+-5% 1/6W
R607	61A 60212352T	CFR 12K OHM+-5% 1/6W
R608	61A 21047352T	MFR 47K OHM +- 1% 1/6W
R610	61A 60210252T	CFR 1K OHM+-5% 1/6W
R612	61A 60247252T	CFR 4.7K OHM+-5% 1/6W

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
R613	61A 60268252T	CFR 6.8K OHM+-5% 1/6W	
R614	61A 21010352T	MFR 10K OHM +- 1% 1/6W	
R615	61A 21030352T	MFR 30K OHM +- 1% 1/6W	
R617	61A175L22152T	CFR 220 OHM +-5% 1/2W	
R619	61A175L15952T	CFR 1.5 OHM +-5% 1/2W	
R633	95A 90 23	TIN COATED	
R636	95A 90 23	TIN COATED	
R701	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R702	61A 60291352T	CFR 91K OHM +-5% 1/6W	
R703	61A 60262252T	CFR 6.2K OHM +-5% 1/6W	
R704	61A 17218252T	CFR 1.8K OHM +-5% 1/4W	
R705	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R706	61A 60210052T	CFR 10 OHM +-5% 1/6W	
R707	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R708	61A 60282352T	CFR 82K OHM +-5% 1/6W	
R709	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R710	61A175L15052T	CFR 15 OHM +-5% 1/2W	
R711	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	
R713	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R714	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R715	95A 90 23	TIN COATED	
R717	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R718	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R 719	61A 21011252T	MFR 1.1KOHM +-1% 1/6W	
R720	61A214Y12552T	MGFR 1.2MOHM +-5% 1/4W	
R721	61A 60211452T	CFR 110K OHM+-5% 1/6W	
R722	61A 60212352T	CFR 12K OHM+-5% 1/6W	
R724	61A214Y10552T	MGFR 1M OHM +-5% 1/4W	

R725	61A212Y30452T	MGFR 300K OHM +-5% 1/2W
R726	61A 60210352T	CFR 10K OHM+-5% 1/6W
R728	61A212Y10552T	MGFR 1M OHM+-5% 1/2W
R729	61A 60210352T	CFR 10K OHM+-5% 1/6W
R730	61A 17247952T	CFR 4.7 OHM +-5% 1/4W
R731	61A175L27452T	CFR 270K OHM +-5% 1/2W
R733	61A 60251352T	CFR 51K OHM +-5% 1/6W
R734	61A214Y47552T	MGFR 4.7M OHM +-5% 1/4W
R736	61A 60282252T	CFR 8.2K OHM +-5% 1/6W
R737	95A 90 23	TIN COATED
R738	61A 60282252T	CFR 8.2K OHM +-5% 1/6W
R739	61A175L62352T	CFR 62K OHM +-5% 1/2W
R740	61A175L27452T	CFR 270K OHM +-5% 1/2W
R741	61A 60247252T	CFR 4.7K OHM+-5% 1/6W
R742	61A175L15452T	CFR 150KOHM+-5% 1/2W
R744	61A 60218252T	CFR 1.8K OHM+-5% 1/6W
R745	61A 60218252T	CFR 1.8K OHM+-5% 1/6W
□R900	61A212Y10652T	10MOHM +-5% 1/2W□□
R901	61A175L47452T	CFR 470K OHM +-5% 1/2W
R902	61A 17213252T	CFR 1.3K OHM +-5% 1/4W

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
R904	95A 90 23	TIN COATED	
R905	61A214Y10552T	MGFR 1M OHM +-5% 1/4W	
R906	61A 17215352T	CFR 15K OHM +-5% 1/4W	
R908	95A 90 23	TIN COATED	
R909	95A 90 23	TIN COATED	
R913	61A214Y20552T	MGFR 2M OHM +-5% 1/4W	
R914	61A 17210052T	CFR 10OHM+-5% 1/4W	
R915	61A 17210352T	CFR 10KOHM +-5% 1/4W	
R916	61A 17222352T	CFR 22KOHM+-5% 1/4W	
R917	61A 17210052T	CFR 10OHM+-5% 1/4W	
R918	61A175L47452T	CFR 470K OHM +-5% 1/2W	
R919	61A175L47452T	CFR 470K OHM +-5% 1/2W	
R921	61A 17251152T	CFR 510 OHM +-5% 1/4W	
R922	61A 17268152T	CFR 680 OHM +-5% 1/4W	
R923	61A 60268152T	CFR 680 OHM +-5% 1/6W	
R924	61A 60211452T	CFR 110K OHM+-5% 1/6W	
R925	61A 60215452T	CFR 150K OHM+-5% 1/6W	
R926	61A 60247352T	CFR 47K OHM+-5% 1/6W	
R928	71A 55 7 T	FERRITE BEAD 9*3.5*0.62	
R929	61A 60233252T	CFR 3.3K OHM+-5% 1/6W	
R930	61A 17222252T	CFR 2.2KOHM+-5% 1/4W	
R931	61A 17210452T	CFR100K OHM +-5% 1/4W	
R932	61A212Y22452T	MGFR 220K OHM +-5% 1/2W	
R933	61A175L22452T	CFR 220K OHM +-5% 1/2W	
R954	61A175L56352T	CFR 56K OHM +-5% 1/2W	
R956	61A 17210252T	CFR 1KOHM +-5% 1/4W	
R960	61A 60247352T	CFR 47K OHM+-5% 1/6W	
R962	61A 17210152T	CFR 100OHM+-5% 1/4W	
R963	61A 17210052T	CFR 10OHM+-5% 1/4W	
R969	61A214Y75352T	MGFR 75K OHM +-5% 1/4W	

R970	61A 60256252T	CFR 5.6KOHM+-5% 1/6W
R971	61A 17210352T	CFR 10KOHM +-5% 1/4W
R972	61A 60268252T	CFR 6.8K OHM+-5% 1/6W
R973	61A 60275352T	CFR 75K OHM +-5% 1/6W
R974	61A 60210152T	CFR 100 OHM+-5% 1/6W
R975	61A212Y10452T	MGFR 100KOHM +-5% 1/2W
R976	61A175L10152T	CFR 100 OHM +-5% 1/2W
R977	61A 17210352T	CFR 10KOHM +-5% 1/4W
R978	61A 17210352T	CFR 10KOHM +-5% 1/4W
ZD101	93A 3953052T	TZX5V6D
ZD105	93A 39 5952T	HZ4C2
ZD401	61A 17210452T	CFR100K OHM +-5% 1/4W
ZD402	93A 3953052T	TZX5V6D
ZD408	93A 3951652T	TELEFUNKEN TZX5V1B
ZD409	93A 3951652T	TELEFUNKEN TZX5V1B
ZD410	93A 39 5952T	HZ4C2
ZD601	93A 3951652T	TELEFUNKEN TZX5V1B
ZD701	93A 39 7752T	HZ5C1

Location	AMS992X 5N	MAIN BOARD FOR S992X-5 M	Remark
ZD703	93A 39 2452T	HZ15-2	
ZD704	93A 3951952T	TZX8V2B	
ZD901	93A 3953052T	TZX5V6D	
ZD902	93A 39 8252T	HITACHI HZ12A2	
ZD903	93A 3953052T	TZX5V6D	
ZD904	93A 3953252T	TZX24B TFK	

Location	CRS992X 5N	CRT BOARD FOR S992X-5	Remark
	ARS992X5N	CRT BOARD FOR S992X-5	
	40A 581 26605	LABEL	
	87A3504 ZW	CRT COCKET(QQ FOCUS)	
	705A992XR56 01	IC802 ASS'Y	
C817	67A 305220 9T	22UF +-20% 100V	
C829	67A 305470 9	47UF +-20% 100V	
C874	65A 2M103 3A	10000PF 2KV	
FB802	53A 40 8	FILTER	
FB803	53A 40 8	FILTER	
FB804	53A 40 8	FILTER	
FB810	71A 55 26 S	FERRITE BEAD 3.5*6*0.8	
FB852	71A 55 19 T	FERRITE BEAD 9X3.5X0.8	
G2	9A 203 8	BRASS PIN	
IC801	56A 539 5	LM1269NA BY NS	
IC803	56A 539 6	LM2480NA BY NS	
IC804	56A1131 15	NT6828-00023	
P801	33A3278 6A	6P PLUG	
P802	33A3802 14	WAFER EH-14	
R822	61A152M101 64	MOFR 100OHM+-5% 2W	
R848	61A152M159 64	MOFR 1.5 OHM +-5% 2W	
R863	61A152M100 64	MOFR 10 OHM+-5% 2W	

Location	ARS992X 5N	CRT BOARD FOR S992X-5	Remark
	6A 31 4	BRASS	

	715A 861 O	CR PCB	
(R817)	61A 60222152T	CFR 220 OHM +-5% 1/6W	
C801	64A178J104 0T	CL21X0.1UF 63V +-5%	
C802	64A178J104 0T	CL21X0.1UF 63V +-5%	
C803	64A178J104 0T	CL21X0.1UF 63V +-5%	
C804	64A178J104 0T	CL21X0.1UF 63V +-5%	
C805	67A 309101 3T	100UF +-20% 16V	
C806	67A 309109 7T	1.0UF +-20% 50V	
C807	67A 309109 7T	1.0UF +-20% 50V	
C808	65A 44256013T	56PF +-5% NPO 50V	
C809	67A 309109 7T	1.0UF +-20% 50V	
C810	67A 309470 7T	47UF +-20% 50V	
C811	64A700J1030AT	0.01UF 50V +-5%	
C812	65A 450103 7T	10000PF/50V Y5V +80% -20	
C813	65A 442471 9T	470PF 50V	
C814	65A 44247013T	47PF +-5% NPO 50V	
Location	**ARS992X 5N**	**CRT BOARD FOR S992X-5**	**Remark**
C815	65A 450104 7T	0.1UF +80-20% 50V Y5V	
C816	67A 309101 3T	100UF +-20% 16V	
C818	64A178J104 0T	CL21X0.1UF 63V +-5%	
C819	65A 44210013T	10PF +-5% NPO 50V	
C820	65A 44210013T	10PF +-5% NPO 50V	
C821	64A178J104 0T	CL21X0.1UF 63V +-5%	
C822	64A178J104 0T	CL21X0.1UF 63V +-5%	
C823	64A178J104 0T	CL21X0.1UF 63V +-5%	
C824	64A178J104 0T	CL21X0.1UF 63V +-5%	
C825	65A 44210013T	10PF +-5% NPO 50V	
C826	65A 2K101 5T	100PF/2KV	
C828	65A 550103 4T	0.01UF 100V/Z5V	
C831	65A 550103 4T	0.01UF 100V/Z5V	
C832	67A 309109 9T	1UF +-20% 100V	
C833	65A 450104 7T	0.1UF +80-20% 50V Y5V	
C840	65A 550103 4T	0.01UF 100V/Z5V	
C851	67A 309470 7T	47UF +-20% 50V	
C852	65A 450104 7T	0.1UF +80-20% 50V Y5V	
C853	67A 70109 9T	1UF +-20% 100V	
C854	67A 70109 9T	1UF +-20% 100V	
C855	67A 70109 9T	1UF +-20% 100V	
C856	65A 550103 4T	0.01UF 100V/Z5V	
C857	65A 550103 4T	0.01UF 100V/Z5V	
C858	65A 550103 4T	0.01UF 100V/Z5V	
C859	65A517K102 2T	1000PF 10% Z5P 500V	
C861	65A517K102 2T	1000PF 10% Z5P 500V	
C862	65A517K102 2T	1000PF 10% Z5P 500V	
C864	65A 550103 4T	0.01UF 100V/Z5V	
C867	65A 550103 4T	0.01UF 100V/Z5V	
C871	67A 309101 3T	100UF +-20% 16V	
C873	65A517K102 2T	1000PF 10% Z5P 500V	
C875	65A 450104 7T	0.1UF +80-20% 50V Y5V	
C876	65A 44210113T	100PF +-5% NPO 50V	
C877	65A 44210113T	100PF +-5% NPO 50V	

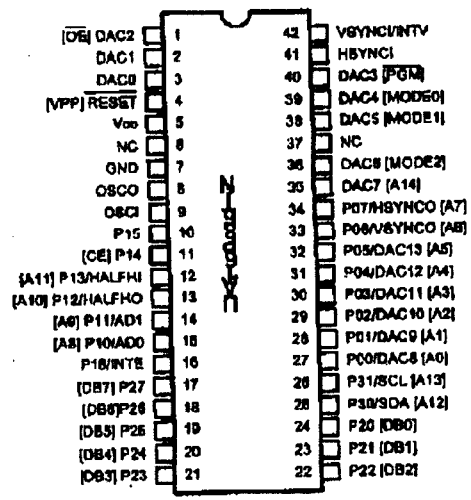
C879	65A 1K470 1T	47P 1KV	
D801	93A 64 1152T	DIODE 1N4148	
D802	93A 64 1152T	DIODE 1N4148	
D803	93A 64 1152T	DIODE 1N4148	
D804	93A 64 1152T	DIODE 1N4148	
D805	93A 64 1152T	DIODE 1N4148	
D806	93A 64 1152T	DIODE 1N4148	
D820	95A 90 23	TIN COATED	
D850	93A 6450152T	SWITCHING DIODE BAV21	
D851	93A 6450152T	SWITCHING DIODE BAV21	
D852	93A 6450152T	SWITCHING DIODE BAV21	
D853	93A 6450152T	SWITCHING DIODE BAV21	
D854	93A 6450152T	SWITCHING DIODE BAV21	
D855	93A 6450152T	SWITCHING DIODE BAV21	
Location	**ARS992X 5N**	**CRT BOARD FOR S992X-5**	**Remark**
D856	93A 6431G52T	BAV20	
D857	93A 6431G52T	BAV20	
D858	93A 6431G52T	BAV20	
D863	93A1060 652T	F R D BYV26C	
FB801	71A 55 9 T	CORE RF BEAD RH 3.5X6X0.	
FB805	71A 55 9 T	CORE RF BEAD RH 3.5X6X0.	
FB806	71A 55 9 T	CORE RF BEAD RH 3.5X6X0.	
FB807	95A 90 23	TIN COATED	
FB808	95A 90 23	TIN COATED	
FB809	71A 55 9 T	CORE RF BEAD RH 3.5X6X0.	
FB851	71A 55 9 T	CORE RF BEAD RH 3.5X6X0.	
J801	95A 90 23	TIN COATED	
J802	95A 90 23	TIN COATED	
J803	95A 90 23	TIN COATED	
J804	95A 90 23	TIN COATED	
J805	95A 90 23	TIN COATED	
J806	95A 90 23	TIN COATED	
J807	95A 90 23	TIN COATED	
J808	95A 90 23	TIN COATED	
J809	95A 90 23	TIN COATED	
J810	95A 90 23	TIN COATED	
J811	95A 90 23	TIN COATED	
J812	95A 90 23	TIN COATED	
L801	73A 5433810T	0.33uH +-10%	
L802	73A 5433810T	0.33uH +-10%	
L803	73A 5433810T	0.33uH +-10%	
L804	95A 90 23	TIN COATED	
L850	73A 5422810T	0.22UH +-10%	
L851	73A 5422810T	0.22UH +-10%	
L852	73A 5422810T	0.22UH +-10%	
Q801	65A 44210113T	100PF +-5% NPO 50V	
Q802	65A 44210113T	100PF +-5% NPO 50V	
Q803	65A 44210113T	100PF +-5% NPO 50V	
R801	61A 60275052T	CFR 75 OHM+-5% 1/6W	
R802	61A 60275052T	CFR 75 OHM+-5% 1/6W	
R803	61A 60275052T	CFR 75 OHM+-5% 1/6W	

R804	61A 60233052T	CFR 33 OHM +-5% 1/6W	
R805	61A 60233052T	CFR 33 OHM +-5% 1/6W	
R806	61A 60233052T	CFR 33 OHM +-5% 1/6W	
R807	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R808	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R809	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R810	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R811	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R812	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R813	61A 21010352T	MFR 10K OHM +- 1% 1/6W	
R814	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R815	61A 60210152T	CFR 100 OHM+-5% 1/6W	
Location	**ARS992X 5N**	**CRT BOARD FOR S992X-5**	**Remark**
R818	61A 60210152T	CFR 100 OHM+-5% 1/6W	
R820	61A 60216352T	CFR 16K OHM +-5% 1/6W	
R821	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R823	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R824	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R825	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R826	61A 60222152T	CFR 220 OHM +-5% 1/6W	
R827	61A 60210352T	CFR 10K OHM+-5% 1/6W	
R828	61A 60222252T	CFR 2.2K OHM +-5% 1/6W	
R830	61A 60256252T	CFR 5.6KOHM+-5% 1/6W	
R831	61A 60256252T	CFR 5.6KOHM+-5% 1/6W	
R832	61A 60275252T	CFR 7.5K OHM +-5% 1/6W	
R833	61A 60247452T	CFR 470K OHM+-5% 1/6W	
R834	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R835	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R836	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R837	61A 60210252T	CFR 1K OHM+-5% 1/6W	
R839	61A 60222252T	CFR 2.2K OHM +-5% 1/6W	
R840	61A 60247052T	CFR 47 OHM +-5% 1/6W	
R841	61A 60247052T	CFR 47 OHM +-5% 1/6W	
R842	61A 60247052T	CFR 47 OHM +-5% 1/6W	
R847	61A 60210052T	CFR 10 OHM +-5% 1/6W	
R854	61A 17251052T	CFR 51OHM +-5% 1/4W	
R855	61A 17251052T	CFR 51OHM +-5% 1/4W	
R856	61A 17251052T	CFR 51OHM +-5% 1/4W	
R857	61A 17210552T	CFR 1MOHM +-5% 1/4W	
R858	61A 17210552T	CFR 1MOHM +-5% 1/4W	
R859	61A 17210552T	CFR 1MOHM +-5% 1/4W	
R860	61A 17210252T	CFR 1KOHM +-5% 1/4W	
R861	61A 17210252T	CFR 1KOHM +-5% 1/4W	
R862	61A 17210252T	CFR 1KOHM +-5% 1/4W	
R872	61A175L56052T	CFR 56 OHM +-5% 1/2W	
R873	61A175L56052T	CFR 56 OHM +-5% 1/2W	
R874	61A175L56052T	CFR 56 OHM +-5% 1/2W	
R879	61A175L10152T	CFR 100 OHM +-5% 1/2W	
R880	61A175L56452T	CFR 560K OHM +-5% 1/2W	
ZD801	93A 39 7752T	HZ5C1	

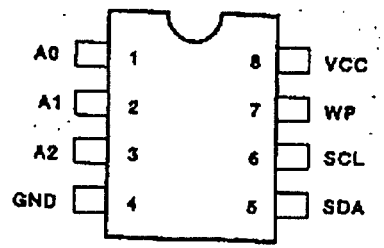
Location	**705A992XR56 01**	**IC802 ASS'Y**	**Remark**
	2A6003 1	SCREW NUT	
	90A6026 2	HEAT SINK	
	M1A1730 8128	SCREW M3x8	
IC802	56A 551 9	LM2467TA BY NS	
Location	**705A992XC56 01**	**IC601/IC903 ASS'Y**	**Remark**
	19A 554 1	CLIP	
	32A3028 8	MICA	
	90A 388 2 A	Heat Sink	
IC601	56A 574 1	TDA9302H BY SGS	
IC903	56A 133 12 ST	3 PIN 12V REG.L7812CV SG	
Location	**705A992XC56 01A**	**IC901/Q904 ASS'Y**	**Remark**
	90A6042500 A	HEAT SINK	
	M1A1730 10128	SCREW M3x10	
IC901	56A 618 1	STR-G8656D LF1129	
Q904	57A 724 4	2SK2996	
Location	**705A992XC57 01A**	**Q403 ASS'Y**	**Remark**
	5A 71 1	TRANSISTOR HOUSING	
	32A3028 8	MICA	
	52A6016 4	SPRING PIECE	
	90A 363519 P	HEAT SINK	
	M1A1130 8128	SCREW 3.0X8	
	M1A1730 8128	SCREW M3x8	
	M1A1730 10128	SCREW M3x10	
	M1A1730 12128	SCREW	
D408	93A 220 19	DMV1500H DAMOER MODUAL	
HV1	95A205T 30052	M95	
Q403	57A 755 1	2SC5411	
Q405	57A 415 1	TR.NPN TIP122/FAIRCHILD	
Q911	57A 600512	STP8NS25	
Location	**705A992XC57 03A**	**Q420 ASS'Y**	**Remark**
	90A 361506 A	HEAT SINK	
	M1A1730 7128	SCREW	
Q420	57A 600 21	IRF630M/S.T	
Location	**705A992XC57 04A**	**Q412 ASS'Y**	**Remark**
	90A 360 2	HEAT SINK	
	M1A1730 8128	SCREW M3x8	
Q412	57A 600 21	IRF630M/S.T	
Location	**705A992XC87 01**	**AC IN SOCKET**	**Remark**
[]	87A 501 6	RECEPTACLES	
	95A 800 2 2C	WIRE & CORE	
	96A 29 6190	H.S. TUBING DIA.4.0MM	
Location	**705A992XC93 02**	**BD901 ASS'Y**	**Remark**
	90A6038 1	HEAT SINK	

	M1A1130 8128	SCREW 3.0X8	
BD901	93A 50460 7	GBJ4J	
Location	**705A992XC93 01A**	**D921 ASS'Y**	**Remark**
	90A6030 3	heat sink	
D921	93A 6073A	F R D 3A/400V 31DF4/I.R	
Location	**750A5455992AV1**	**LG 19" 0.26 ART COATIN**	**Remark**
[illegible]	750A54551AV	LG 19"0.26 ART COATING C	
Location	**750A5455992AV1**	**LG 19" 0.26 ART COATIN**	**Remark**
C418	63A210J4028FC	4000PF/2KV	
C419	63A210J4027FC	4U 1600V	
C425	63A210J2243CC	.22U 400V	
C429	63A210J1252MC	1.2UF/250V +-5%	
C438	63A210J1042BM	0.1UF 250V	
C439	63A210J3042CC	0.3UF/250V	
C449	65A 2K121 5A	120PF 2KV	
C450	65A 2K101 5T	100PF/2KV	
C453	63A210J2742CM	0.27UF +-5% 250V (PMH)	
C498	65A 1K221 2T	220PF/1KV Z5P+-10%	
C499	65A 1K680 1T	68PF 1KV	
L402	73A 253123 H	[illegible]	
R498	61A 17256352T	CFR 56K OHM +-5% 1/4W	
R618	61A 208828 64	MOFR 0.82OHM +-5% 1W	
R735	61A 60230252T	CFR 3K OHM+-5% 1/6W	
TP498	95A201M 50152	15" PULSE	

9. IC BLOCK DIAGRAM



IC101:NT68P61AU



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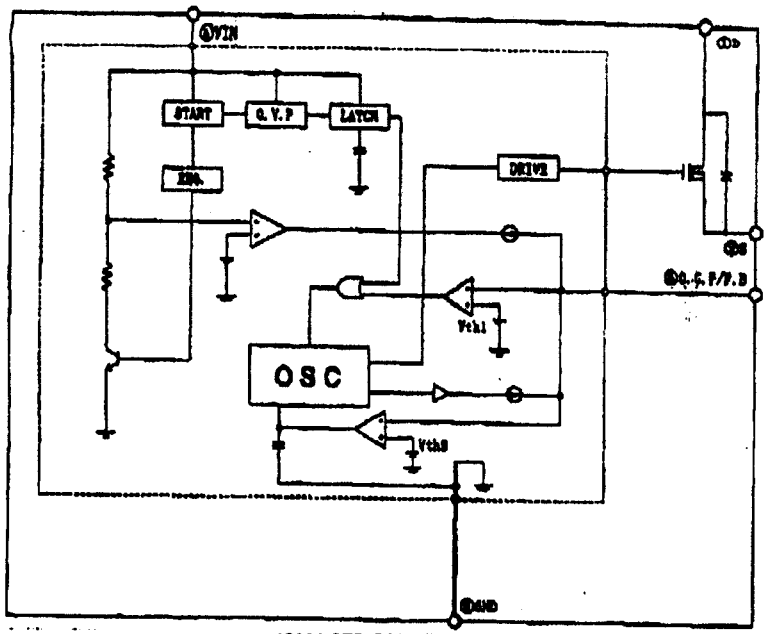
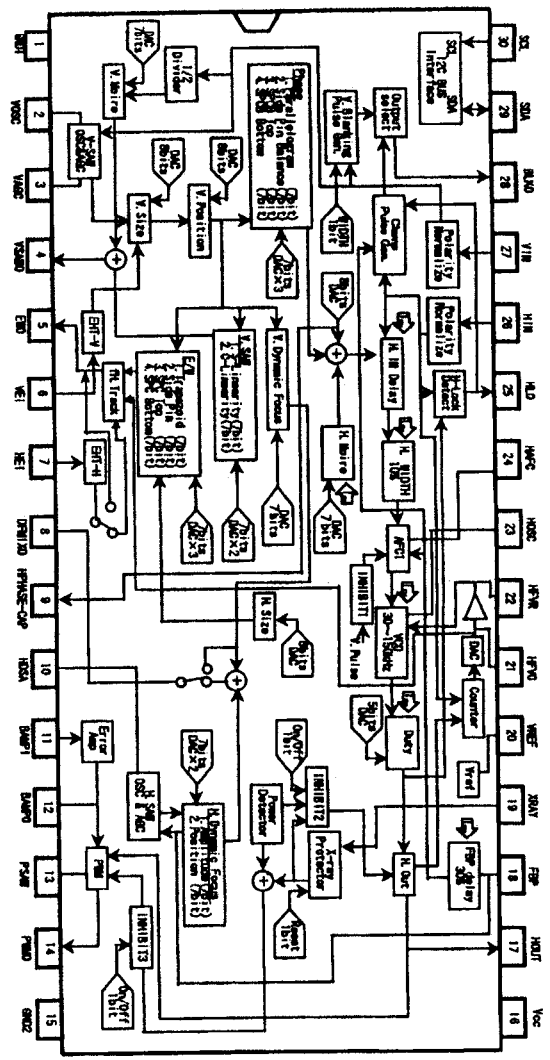


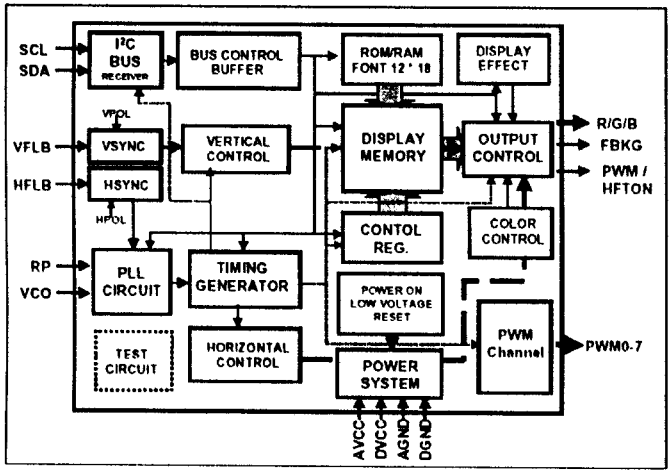
IC901:STR-G8656D

μPC1888ECT Block Diagram

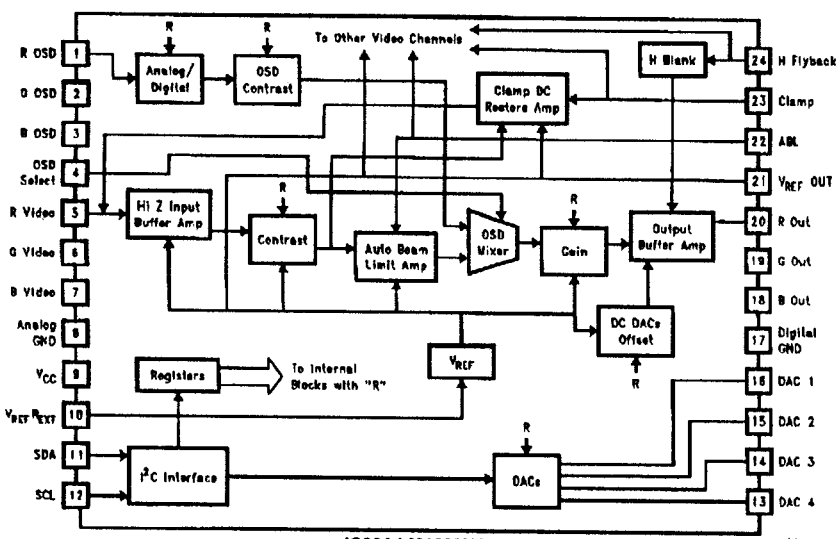


IC401:UPC1888ECT

Block Diagram

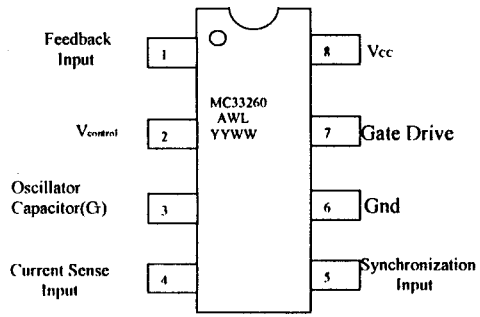


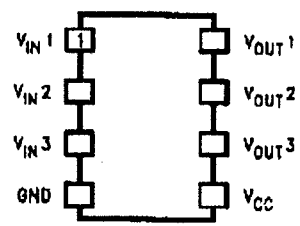
IC804 NT6828-00023



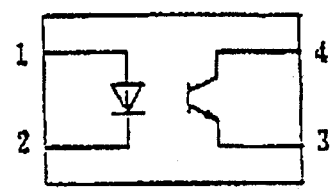
IC801:LM1269NA

IC902 MC33260 PIN CONNECTIONS

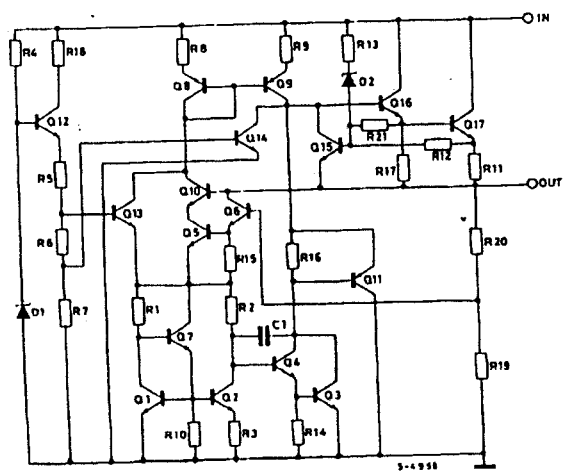




IC803:LM2480NA



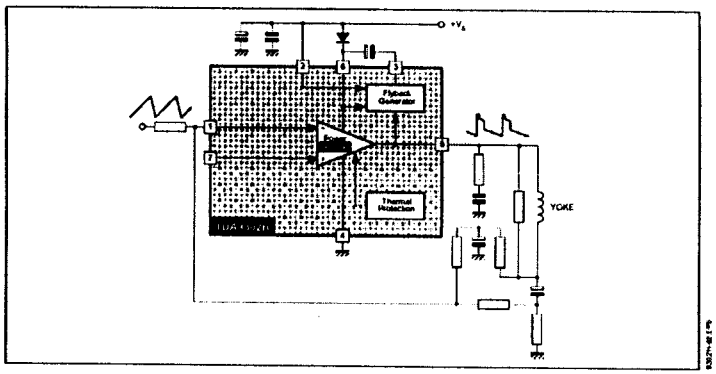
IC904:PC123



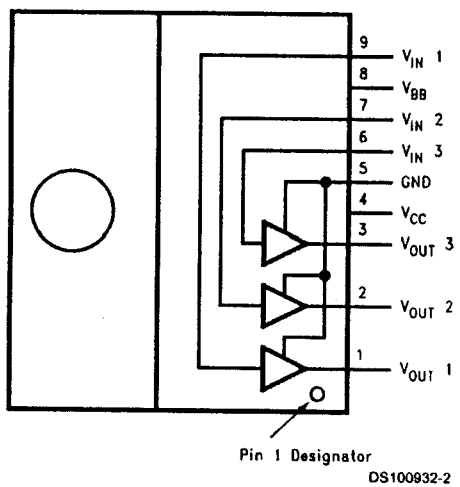
C903:L7812CV

IC601 TDA9302H

BLOCK DIAGRAM

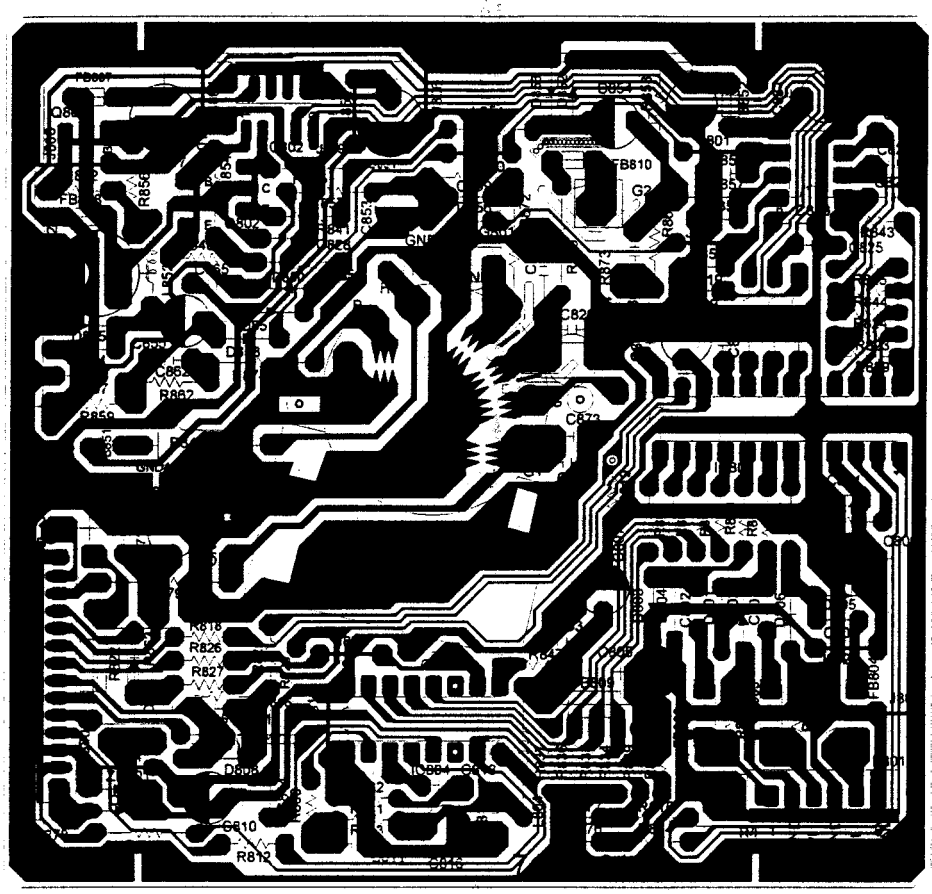


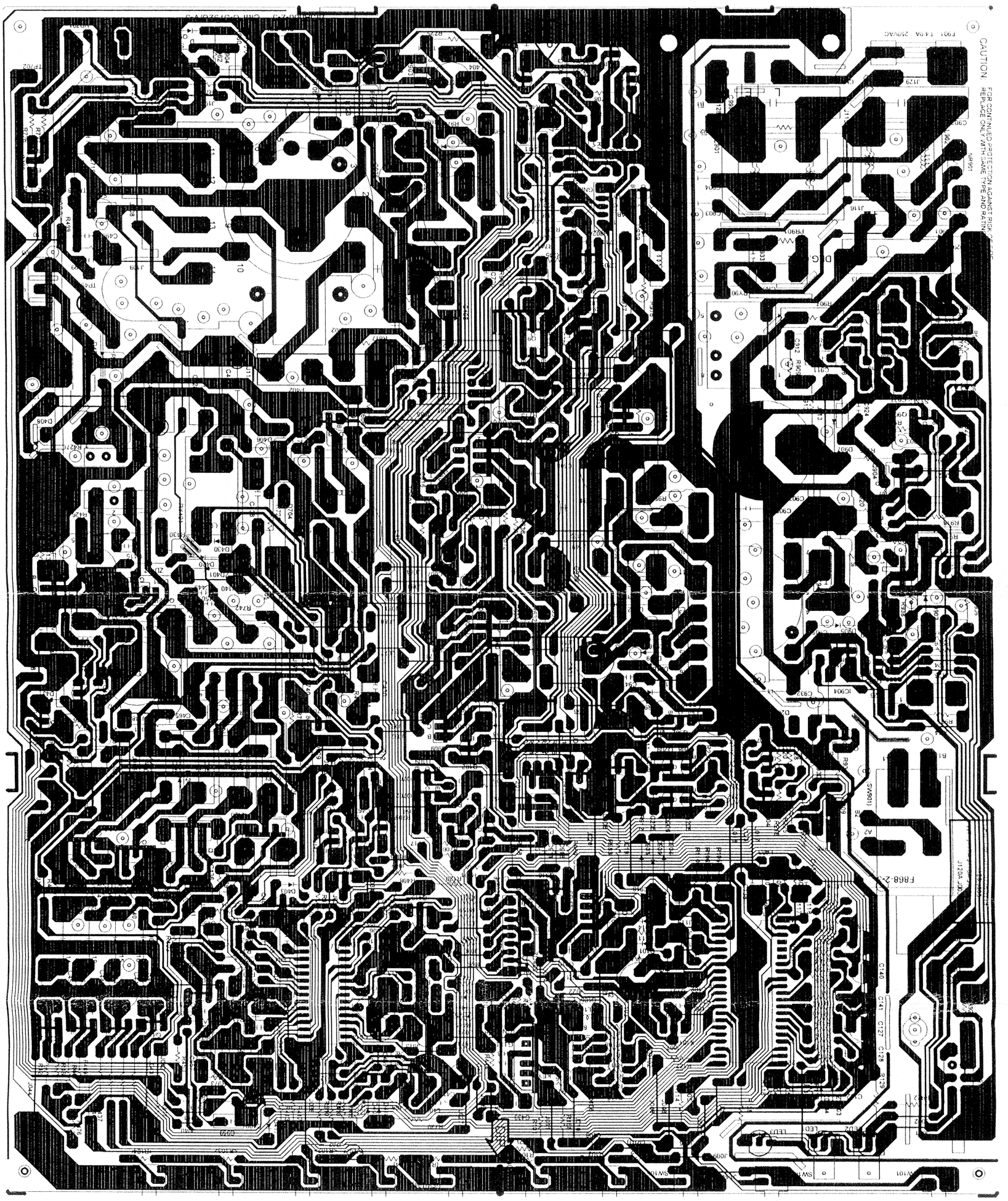
IC803 LM2437



DS100932-2

10-2 CRT BOARD LAYOUT




CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE
REPLACE ONLY WITH SAME TYPE AND RATING
F901 1.6A 250VAC
F868-2
SW901
SW101

CMPC S992X-5
715A868-*

IC101 NT6861AU
IC102 24C08
IC401 UPC1888ECT
IC801 STR-G8656
IC902 MC33260
IC903 L7812CV
IC904 PC123

T801 80A792-2-*
T803 79A167 -120-T
T402
L801 73A174-2-HA
L802 73A174-17-HJ
L901 73A174-2-HA
L904 EE25

X101 93A22-22
PR901 77A280-5-4
RY901 77A280-5-4
SC801 T84B05G
NR901 61A58-8
F901 84A7-40 4A/250VAC

CN901
CN902
P105 NC
P106
P202
P801
P903
J006
J035
J081
TP702
TP901
SW101 S.B.T
SW102 EXIT
SW103 ENTER
SW104 DEC LEFT
SW105 RIGHT

P13 H.F
P23 +12V
PWMO
B+
EW
VSAWO
P34
P36
VDF
CS1
HEI
H-OUT
PWMO
H.T
P42 12V
P23
P36
H/B
EW
SUSPEND
-12V
CS3
H.T
G.LED
CS4
5V
H/B
V/B
ROTATION
CS2
CS0
CLP
P38
DC OUT
H.CENTER
ROTATION COIL
P701

5V
H/S
V/S
SCL1
SDA1
G.LED
R.LED
KEY
SH.A
SH.B
14.5V
+12V
7V
-12V
FBP
SCL
SDA
MUTE
CS0
CS1
CS2
CS3
OFF
SUSPEND
R.LED
P12
G.LED
CS4
ROTATION
BRITE
HOUT

01/08/2002
05/29/2002
06/28/2002

NOTES:
This schematic, we cannot guarantee the accuracy of this information, after the date of publication and disclaims liability for changes, errors or ommissions.

1 IC901 PIN1 472V 10.6us
2 IC901 PIN2 540mv 10.6us
3 IC901 PIN5 5.66V 10.6us
4 T901 PIN11 264V 10.6us
5 T901 PIN13 364V 10.6us
6 T801 PIN14 64V 10.6us
7 T801 PIN16 68V 10.6us
8 T801 PIN9 45.5V 10.6us
9 IC401 PIN5 640mv 13.4ms
10 IC801 PIN5,6,7 620mv 10.6us
11 IC802 PIN1 51V 10.6us
16 IC101 PIN41 4.76V 10.6us
17 IC401 PIN25 4.76V 10.6us
18 IC401 PIN17 780mv 10.6us
19 IC401 PIN18 6.2V 10.6us
20 Q402 G 9V 10us
21 Q402 D 80V 10us
22 Q403 B 12.9V 10us
23 Q403 C 1.24KV 10us
24 Q412 D,G,S Q417 D,G,S 316V 10us
25 Q408 B 1.52V 10us
26 Q811 D 220V 10us

715A861-XX

MODEL	S992X-5	DRAWED BY	H.Z.YU
P/N	S992X-5-01-A	CHECKER	
DATE	JUL-22-2002	APPROVED BY	X.M.ZHANG

PARTS NO:41A31-108